

Ship
Direction

OBSERVERS:

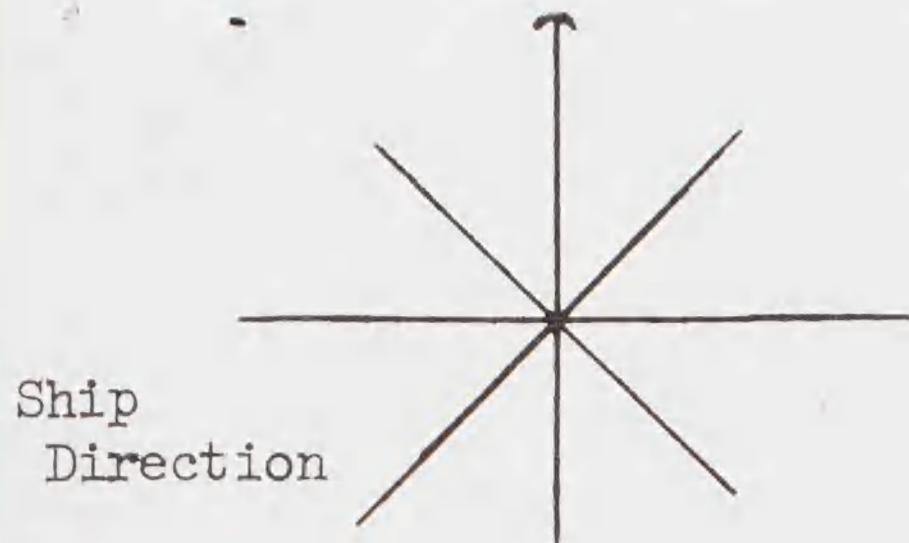
SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

SPECIMEN

or

Date 18 April 67
Pg. # 1

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
1430					
1445	Bl. Brant	15			Breeds winter
1450	Soot/sld.	6			{ Beg in observation
1450	Phal. sp.	5	ee		{ Moderate Fog
1451	S/SL	40			
1452	S/SL	12	ee		
1454	S/S	17	ee		on H ₂ O
	SKUA	1			
1455	S/S/	50±10			chasing 1 S/S
1458	Shorebird sp.	15	NW		on H ₂ O
1502	Loon sp.	22±5	NW		
1504	Br. Pelican	1			on H ₂ O
1508	Shorebird sp.	6	NW		
1510	Gull sp	1	W		imm
1513	Shorebird	6			
1515	W.Gull	1			
	Cal.Gull	1			Following
1519	Shorebird	15±5	NW		
1527	"	6	NW		
1529	Loon Sp.	50±10	NW		
1530	Pelagic Corm.	1	W		
1535	N. Phalarope?	1500±500			on H ₂ O
1537	Cormorant	1	W		brandt Brandt or D.C.
1540	Pale-foot	1			on H ₂ O
1540	Shorebird	25±5	W		
42	S/S	1	SW		
47	Shorebird	100±20	NW		
47	W. Gull	1			ad.
50	Shorebirds	25±5	NW		
55	"	10	NW		
58	Loon	1	NW		
1602	"	1	NW		
1603	"	1	NW		
04	Shorebirds	5	N		
05	"	20±5	N		
06	S/SL	1	ee		
09	Loon	1	N		



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

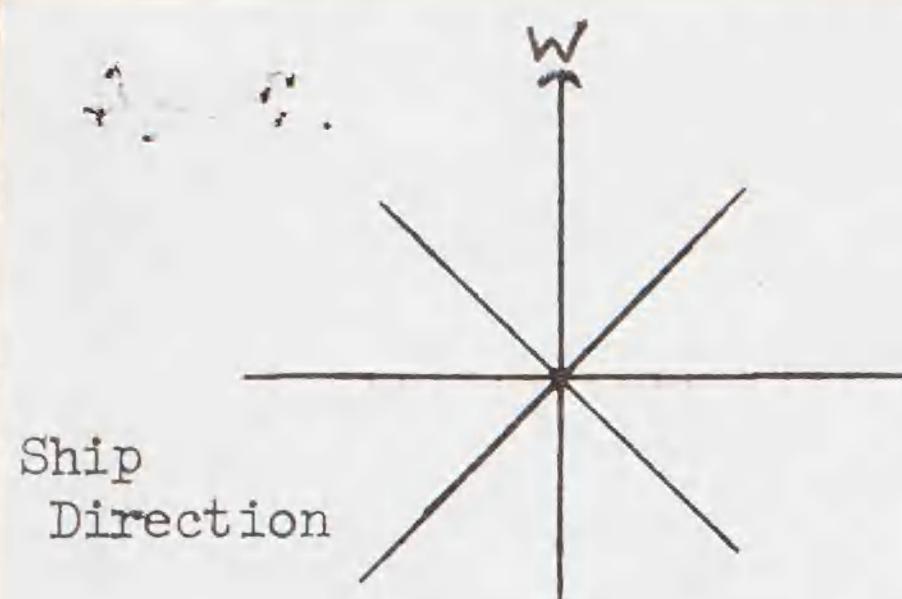
Ship
Direction

SPECIMEN
or

Date 18 April 1967
Pg. # 2

TIME SPECIES # DIR. BAND NO. REMARKS

1611	Rib Gull	1			following ad
1615	Loon	1	N		
TF 1616	"	5	N		
TF 1616	Shorebirds	12	N		
1617	Loon	1	NW		
TF 1621	"	9	NW		
1623	S/SL	1	(ee)		
FF 1627	Shorebirds	5	N		
	Boneparts	3			
	Gull sp.	2			
	W. Gull	11			
	S/SL	1			
	Pale Foot	1			
	Purpore				
TF 1630	Loons	18	N		33-47
TF 1633	"	15	N		118-34
1636	S/SL	3	N		
TF 1637	Shorebirds	8	N		
1646	Loons	8	N		
47	"	3	N		
58	"	6	N		
1700	BRANT	1	N		
1703	"	2	N		
1707	PHAL. SP.	4	W		
1708	SOOTY/SL	5	SSE		
1712	"	11	SEE		
1713	"	4	E		
1715	"	6	SE		
1718	"	6	EE		
1720	"	6	EEE		
1720	"	3	EESE		
1725	"	1	SEE		
1726	GULL SP.	1	E		
1730	S/SL	6	SE		
1737	N. PHAL.	13			flushed from H2O S
1809	S/S	2	(ee)		
1819	S/S	1	(ee)		
1826	Gull sp	2			H.G., or Cal. G., both ad. / ts.
1828					Sunset

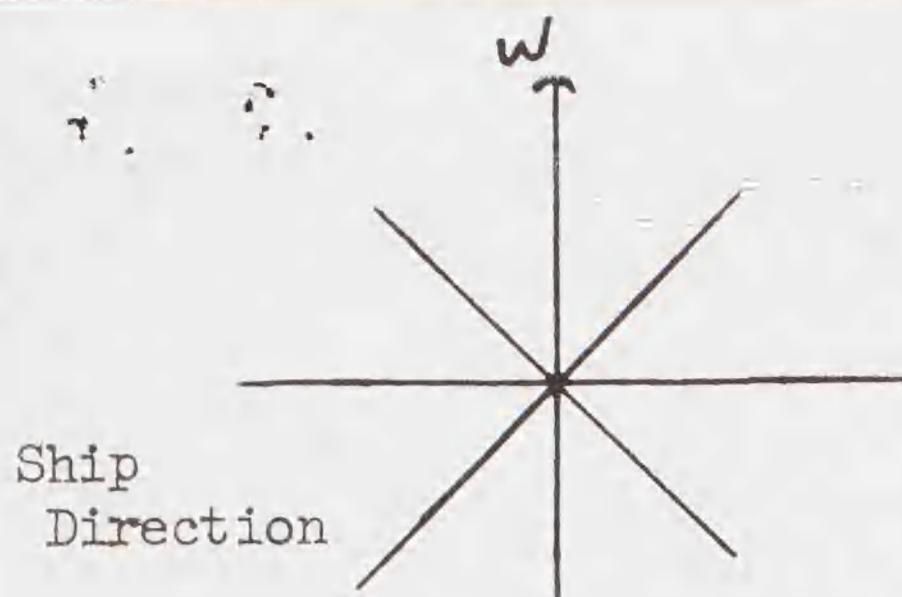


SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

SPECIMEN NON - GRID
or

Date 19 APRIL 1967
Pg. # 1

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
0529					SR; BEGIN OBS.
0535	S/SB	1	O		
0540	S/SB	2	OE		
0545	S/SB	2	E		
0549	S/SB	1	SS		
0550	"	1	SS		
0552	"	2	SS		
0555	"	1	SS		
0558	"	3	SS		
0600		4	O		
0602	"	2	SN		distant
0603	GULL SP.	1	N		
0608	H. GULL	1			Imm.; following
0610	S/SB	5	SN		
0615	"	2	SS		
0620	"	6	SS		
0622	"	2	SS		
0624	"	2	SS		
0626	"	3	SE		
0627	"	3	EE		
0628	"	1	E		
0630	"	2	SS		
0632	"	4	SS		
0634	"	3	SS		
0635	"	5	SS		
0640	BFA	1			following
0654	S/SB	3	S		
0655	"	3	S		
0656	"	2	SS		
0700	BFA	2			on H ₂ O
0705	S/SB	2	N		
0715	S/SB	1	S		
0720	"	2	SS		
0723	"	4	S		
0724	"	4	S		
0730	"	1	S		
0753	S/S	14			All separate sighting
0755	S/S	4	SW		along edge of rain squall
57	S/S	2	SW		
0800	S/S	2	SW		enter rain squall
0802	S/S	2	W		
0804	S/S	1	W		
0805	S/S	5	W		



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

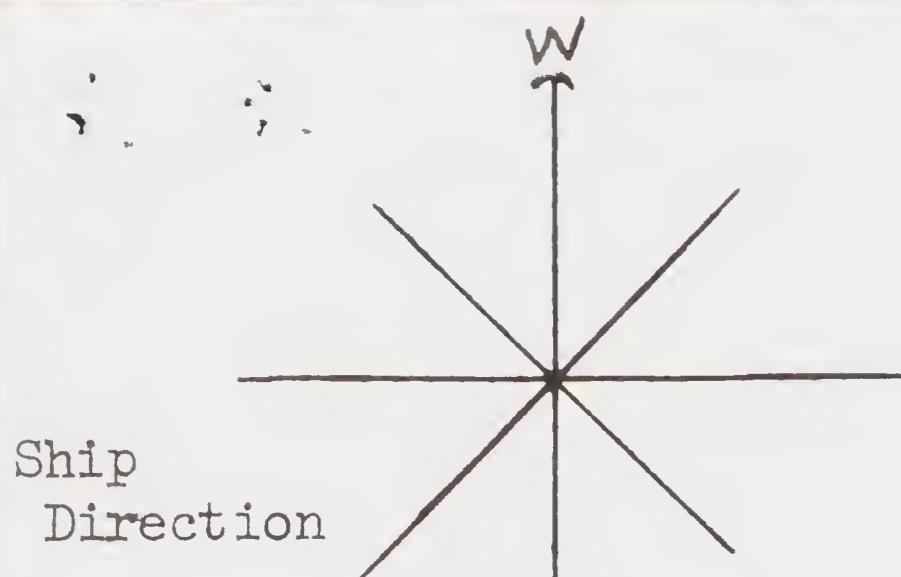
Date 19 Apr. '67
Pg. # 2

SPECIMEN

or

TIME SPECIES # DIR. BAND NO. REMARKS

0806	s/s	4	W	
0811	s/s	1	NE	
0814	s/s	3	NW	
0815	"	1	S	
0825	"	1	NW	
0827	"	2	W	
28	BFA	2		following, no white rump.
32	s/s	1	SW	
35	"	1	W	
37	"	2	SW	
38	"	1	NW	
40	"	1	NW	
43	"	1	NW	
44	"	1	NW	
46	"	1	NW	
49	"	1	NW	
51	"	3	W	
52	"	2	NW	
59	"	3	NW	
0900	"	2	NW	
03	"	1	NW	
04	"	1	N	
06	"	1	NW	
09	"	2	NW	
10	"	5	NW	
10	Gull sp.	1		on H2O & Ad
18	S/SL	1	N	
20	shear/pet	1	S	Man-o-war type Jelly Fish End Brwn
34	BFA	4	ee	Following
50	Pale-foot	1	S	
51	S/SL	2	W	
53	"	3	NW	
55	"	1	N	
1005	Jaeger	1	ee	
1007	W. Gull	3	ee	Following Ad
1018	Jaeger	1		
1025	S/SL	1	S	
1037	w GULL	1	W	
1050	S/SL	3	S	
1051	"	4	S	



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

SPECIMEN **NON GRID**
or

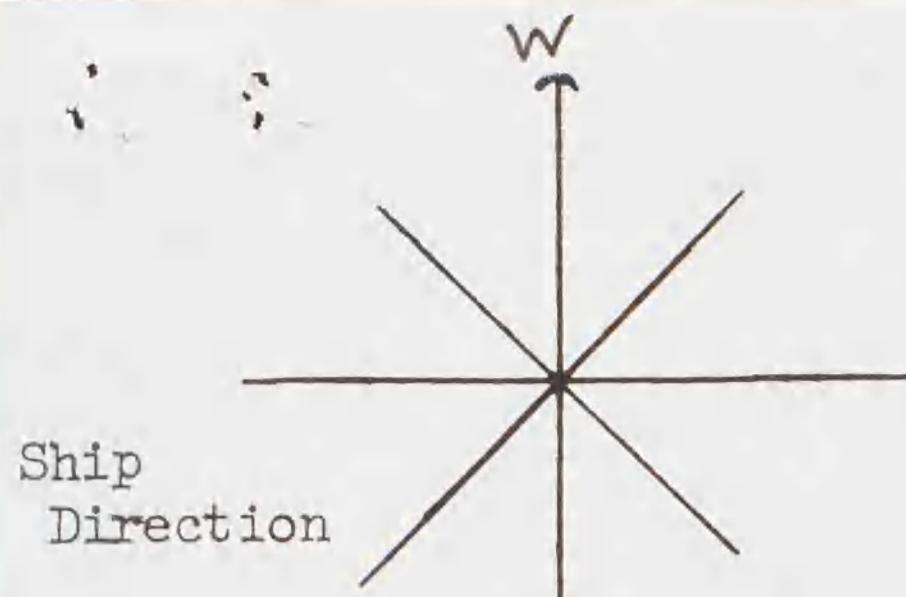
OBSERVERS:

Date 19 APRIL 1967
Pg. # 3

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
1054	S/Sb	2	S		
1055	S/Sb	5	S		
1056	S/Sb	3	S		
1057	BFA	3			
1058	S/Sb	2	S		
1059	"	5	S		
59	"	3	S		
1101	"	1	E		
1104	"	3	SW		
1107	"	3	S		
09	"	3	S		
09	"	3	S		
1111	"	7	S		
1114	"	9	S		
1116	"	9	S		
17	"	2	S		
18	"	6	S		
21	"	8	S		
23	"	7	S		
25	"	6	S		
28	"	4	S		
28	"	3	S		
29	"	3	S		
30	"	3	S		
32	"	2	S		
33	"	3	S		
35	"	2	S		
37	"	3	S		
38	"	2	S		
42	"	4	S		
43	"	2	S		
46	"	5	S		

following, all with dark rumps.

Flushed from water.



Ship
Direction

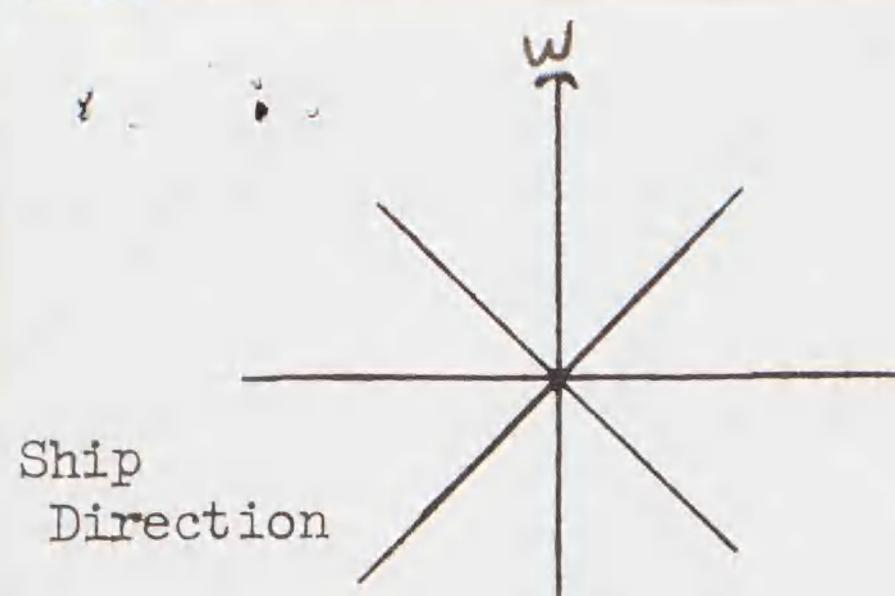
SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

Date 19 April 67
Pg. # 4

SPECIMEN
or

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
1149	S/SL	7	S		
51	"	4	S		
53	"	3	S		
54	"	5	S		
55	"	1	N		
56	"	3	S		
58	"	6	S		
1200	Subarctic Gull	1	NE		disturb
1201	S/SL	3	S		
03	"	5	S		
03	Skua	1	NE		flushed from H ₂ O
04	Fulmar	1	NE		flushed from H ₂ O
05	S/SI	6	S		light
07	"	3	SW		
08	"	1	SW		Darks underwings
10	BFA	5	NE		following
13	S/SL	1	NE		
17	"	1	SW		
20	"	4	NE		
24	"	3	SW		
29	"	5	SW		
Non Grid ↑					Enter Grid
Grid ↓					
1240					
1243	S/SL	1	NE		
1258					Seal (1) 34-58 122-07
1259					
1303	WRSP	1	NE		Seal (1) 34-59 122-10
1304	S/SIb	1	W		
1310	"	1	S		
1314	"	2	W		
1320	BFA	3			
1323	S/SIb	1	W		following - all with dark rump.
1340	"	1	S		
1415	BFA	4			
1417					Following, all with dark rump
1422	Storm Pet.	1	W		Cal. Sea Lion 1 - 34-59, 122-24
1425	BFA	5			
1428					Following, all w/dark rumps
1432	S/SI	1	NW		Fur Seal? 2 (flippers out of H ₂ O)
					34-59 122-26



Ship
Direction

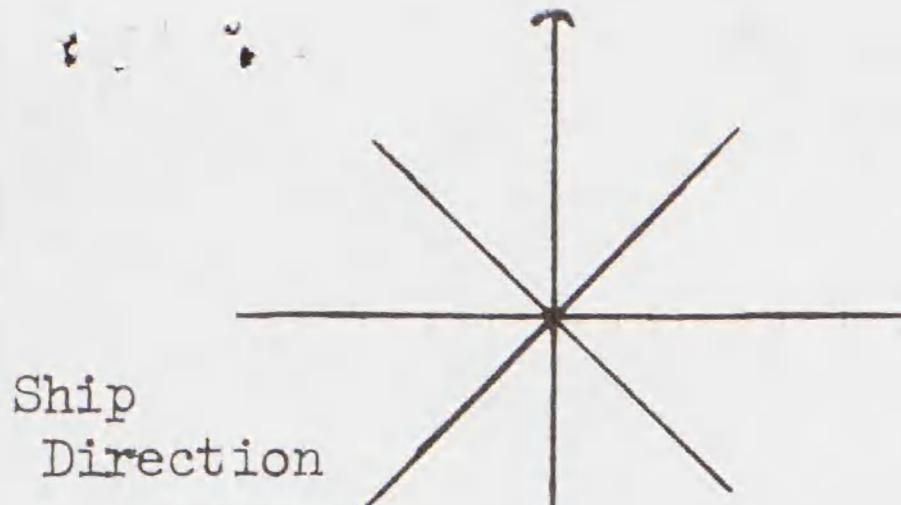
SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

Date 19 April 1967
Pg. # 5

SPECIMEN
or

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
1445	Herring Gull	1			adult following (still following at 1500)
1448	WRSP	1	W		Still following at 1840
1451	BFA	6			Following, 1 w/white rump, rest dark
1456	Small Pterodroma	1			Followed briefly: very white underwings, flight distinctive (suggestive of p. puffinus). Head and back con-color: P. cookii?
1528	Small Pt.	1	W		white underparts, small, distant, flight like that of Bulwer's Pet.
1532	WRSP	2	ee		
1547	"	1	ee		
1552	Shear/Pet	1	N		distant
1555	Storm Petrel	2	ee		
1600	WRSP	1	O		
1610	H. GULL	1			Ad.; following (still following at 1700)
1611	WRSP	1	O		
1613					seal sp. (1) 34-59-122-43
1617	WRSP	1	O		
1620	PTERO SP.	1	N		small, white underparts, distant
1635	WRSP	2	O		
1655	S/SI	1	N		white underwing
1705	WRSP	1	W		
1732	"	2	sw		
1840	Storm Pet	1	S		
1800					Seal(1) 34-59-123-04
1801	WRSP	2	ee		
1815	"	1	W		
1818					Seal(2) 34-59-123-07
1818	WRSP	5	ee		
1820	"	2	ee		
TF 1825	Small Pt.	8	W		white below, all black above, nearly all white
1830	WRSP	1	W		underwings, flapping flight,
1832	Shear/Pet	1	S		
1835	WRSP	2	W		
1839	Storm Pet.	1	sw		
1840	H. Gull	1	ee		Ad Following
1845	BFA	2	ee		"
1846	WRSP	1	e		
1847	"	1	e		
1847					Sunset close of observations



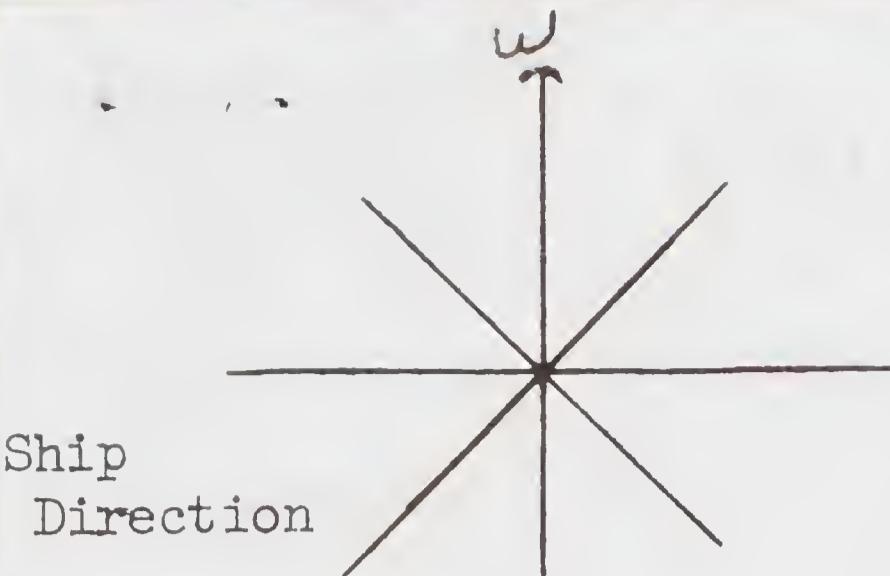
OBSERVERS:

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

SPECIMEN *Nocturnal Grid*
or

Date 19 April 1961
Pg. # 1

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
2045					Begin observations
2134	Small bird	1	W		
2142	BFA	1	NE		
2144	Storm Pet	1	-		
2159	WRSP	1	NE		
2200	Phalarope	1			
2210	Shear/Pet	1			
2228	Phalarope	1			white underparts.
2242	"	1			
2245					Close observations



Ship
Direction

OBSERVERS:

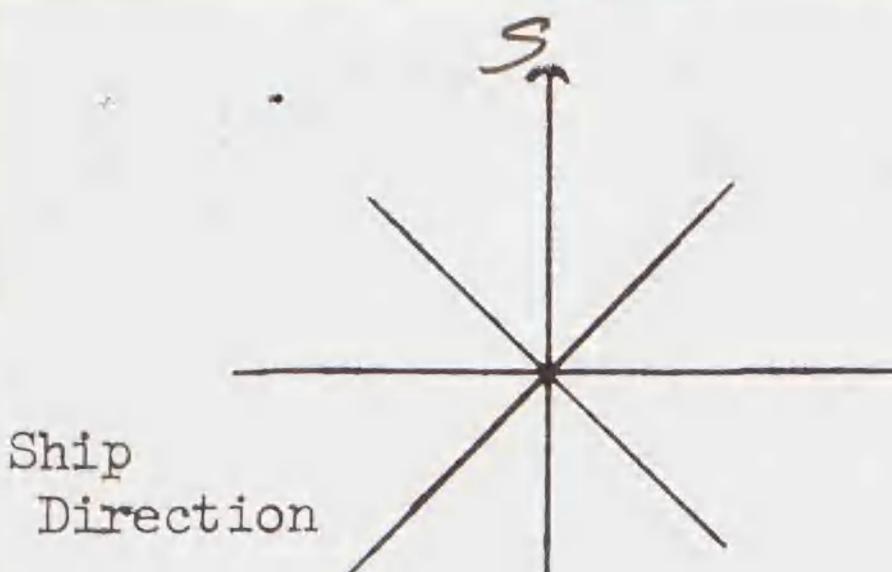
SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

SPECIMEN

or

Date 20 April 1967
Pg. # /

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
0545					SUNRISE
0545					begin observations
0604	H.G.	1			ad. following. Shoddy right primaries
0631	Sm. Pterodr.	1	N		light underwing, all most no black border: back
0655	Sm. Pterod.	1	N		Pretty dark
0702	Shear/Pet	1	NW		Same as above
0710	HG	1			distant, light underside
0713	BFA	1			still following: ad./w shoddy right primaries
0717	Sm. Pterod.	1	N		following: Dark rump. same colors as 0631
0720	"	1	N		"
0730	"	2	N		
0730	R. Phal	21	S		
0731	Gull or Jaeger	1	W		
0738	W RSP	1	NE		
0742	Sm. Pterod.	1	N		Light as 0631, head & back con-color.
0745	R. Phal	2	NW		"
0750	BFA	2			Following, dark rump
0753	Phal. sp	7	N		
0757	Shear/Pet	1	NW		white below.
0804	"	1	N		"
0805	RED PHAL.	11			flushed from H ₂ O W
0807	PTERO. SP.	2	NE		on land
0810	RTTB	1	S		
0816	R. phal.	30 ± 4	E		flushed from H ₂ O SE
0826	"	24			on H ₂ O
0840	Phal. sp.	5			"
0841	RED Phal.	9			"
0851					2 Dark Proprie SE - 35-02 126-00
0908	Small Pt.	1	SE		white below
0920	R. Phal.	18	W		
0933	Small Pt.	1	E		All dark, possibly Heards
0934	R. Phal	20 ± 5	NW		
0937	H. Gull	1	NE		Following Ad., 9th primary missing
0950	Small Pt.	1	S		Dark Head & Back, secondaries gray brown, white below, distinct Black Border on wings uniform all the way around
0955	"	1	S		CCTOS
1000					



Ship
Direction

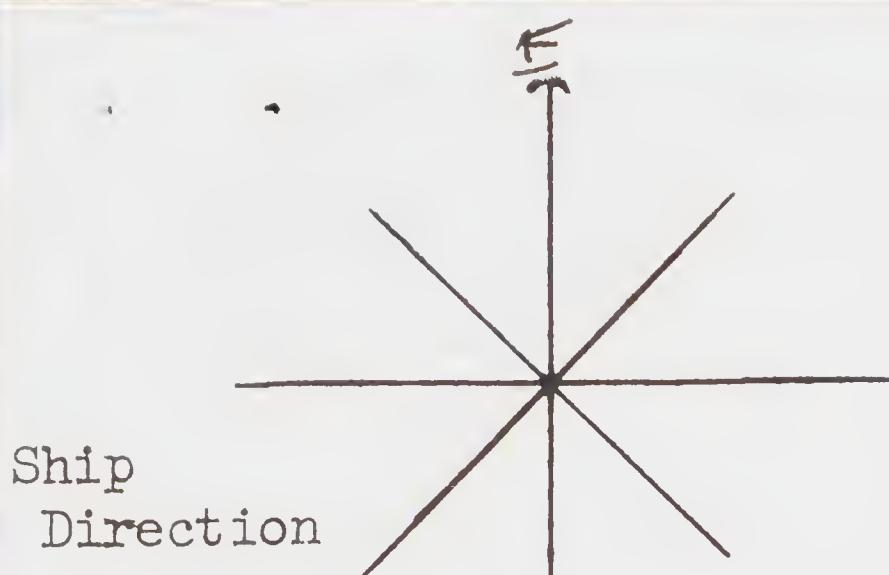
SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

SPECIMEN
or

Date 20 Apr '67
Pg. # 2

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
1004	R.Phal	6			on H ₂ O
1004	Pterod. sp	1	oo		very light underside, molt on wings.
1015	BFA	5			
1025	R.Phal	8	W		
1030	WRSP	3			
	Sm. Pter.	2	oo		heavy molt - scapulars wing coverts
1040	Sm. Pter	3			
	WRSP	2	oo		sitting on H ₂ O
43	Sm Pter	2			
	WRSP	1	oo		on H ₂ O
45	Black-belly plover	1	NW		
46	Sm Pter	1	NW		
47	"	1	N		fairly dark underwing borders
47	WRSP	1	oo		
1059	R.Phal.	33			on H ₂ O, 5 in full Breed. plum.
1121	WRSP				
	mew	1			on H ₂ O
1125	████████ ?				
1145	WRSP		o		
1153	STORM PETSR.		o		
1200	WRSP		s		
1259	R.Phal	25±6	ee		
	mew		ee		LETT TJC NOT retrieved
1320	████████ Gull?	1			
1320	H.G.	1			Coll BAH, TJL
1358	WRSP	1	s		ad.
1515	R.Phal	3	ee		
1530					CC To East
1539	WRSP	1	ee		
1620	BFA	4	oo		following: 1 w/white rump, rest dark
1630	s/s1	1	NE		light underwing
1632	Sm. Pterod.	1	N		very light underwing.
1635					
1643	s/s1	1	NE		huge seal with prominent crown. (forehead)
					34-12 - 126-13



OBSERVERS:

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

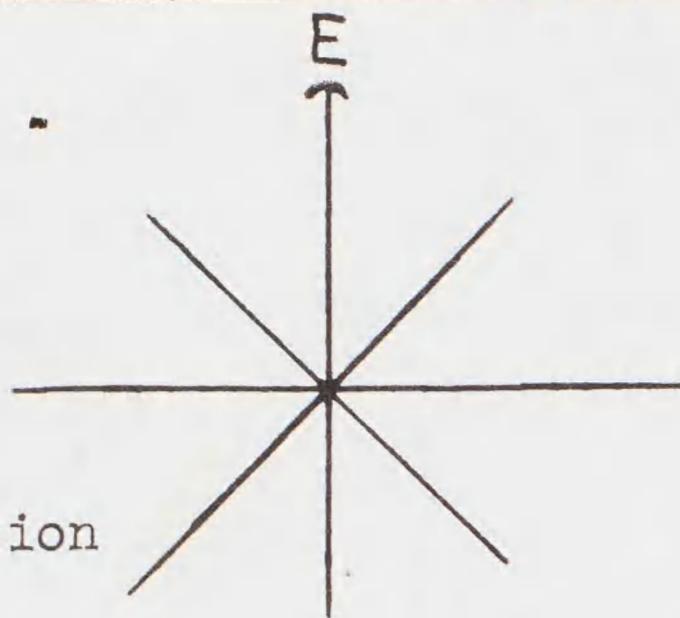
SPECIMEN

or

Date 20 Apr '67
Pg. # 3

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
1720	R. Phal.	2	S		
1724	Pter. sp.	1	S		medium size, distant
1726	P. Cooke	1	N		
1728	WRSP	1	D		
1730	WRSP	1	G		
1754	S/SB	1	G		
1755	WRSP	1	N		
1805	BFA	8	ee		Following 1 with white rags
1810	WRSP	1	ee		
1816	WRSP	1	ee		
1858					SUNSET close observation

Ship
Direction



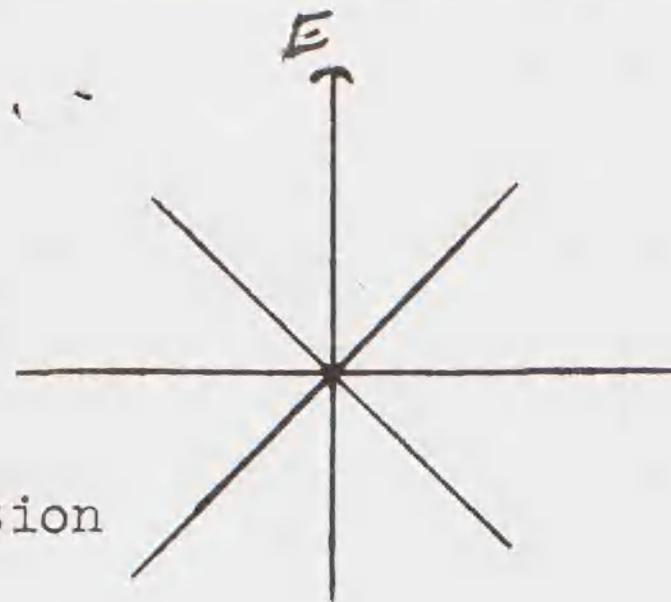
SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

SPECIMEN NOCTURNAL
or

Date 20 APRIL 1967
Pg. # 1

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
2200					
2250	Phal. sp.	1	①		begin obs.
2350	WRSP	1	②		
0000					closed.

Ship
Direction



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

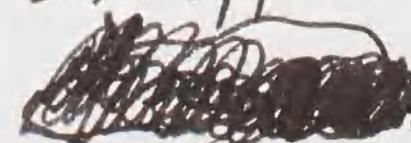
SPECIMEN

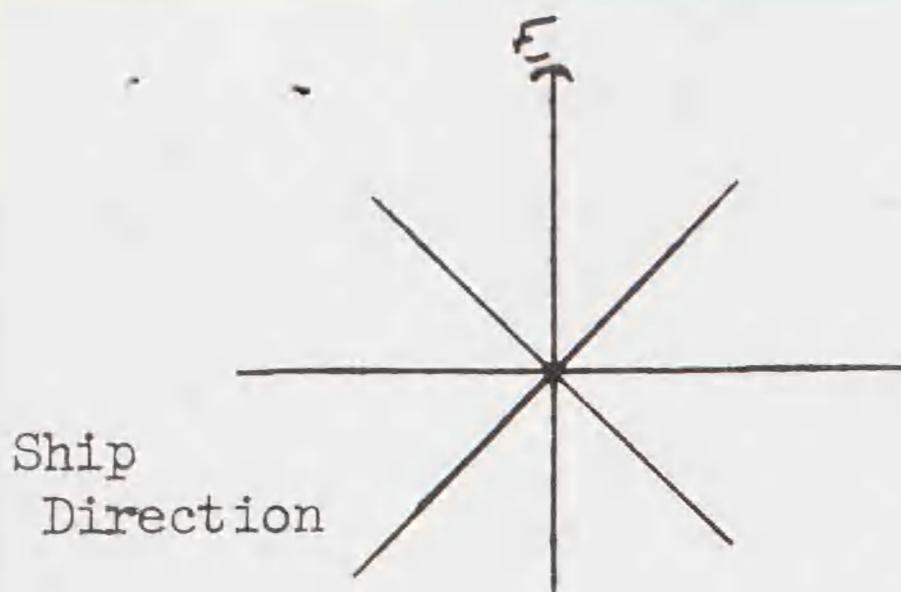
or

TIME SPECIES # DIR. BAND NO. REMARKS

Date 21 April 67
Pg. # 1

0537	-				Scanning horizon ab scotations
0538	BFA	1			Following, No white rump
0615	S/SL	1	N		
28	"	1	NE		
0703	WRSP	5	SE		
0703	-				Whales 4 large ball 20 ft long
0718	H. Gull	1	ee		Ad Following
0725	BFA	2	ee		Following 1 w/white rump
0729	BFA	3	ee		" " "
0730	WRSP	1	ee		
0750	BFA	5			1 w/white rump (mottled), 1 w/injured leg
0805	WRSP	1	ee		
0840	HG	1			probably same as 0718, but has not been present for 45 minutes.
0903	S/SL	1	N		
1007	WRSP				
1028	-	1	ee		Seal, small, long light colored whiskers, (Not over 3 ft long)
1042	"	1	N		34-12 122-24
1044	W. Gull	1			
1046	R. Phal	1	SW		Ad coll TIZ
1056	BFA	5	NE		
1110	Shorebird sp.	8	ee		Following (1 w/mottled white rump, 1 w/injured leg)
1115	WRSP	15-5	ee		distant
1128	Black bellied? Phalar?	4	S		sitting on H ₂ O
1143	Storm Pet	1	N		
1145	WRSP	2	ee		(other?)
1153	S/SL	1	N		
1207	JAEGER	2			both light ph.; 1 long-tail; flushed from H ₂ O to N;
1215	WRSP	3	ee		long-tail gave 5-7 second chase to [redacted] 2nd
1216	WRSP	1	ee		
1220	WRSP	2	ee		
1305	Sabine Gulls	2	ee		on H ₂ O Ad
1337	Storm Pet	1	ee		
1340	WRSP	1	IV		
1342	R Phal	2			on H ₂ O
1342	WRSP	1	ee		
1353	WRSP	2	ee		
1404	WRSP	2			on H ₂ O; 2 appeared to have dark rump
	Storm Pet	2			
		2}			





SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

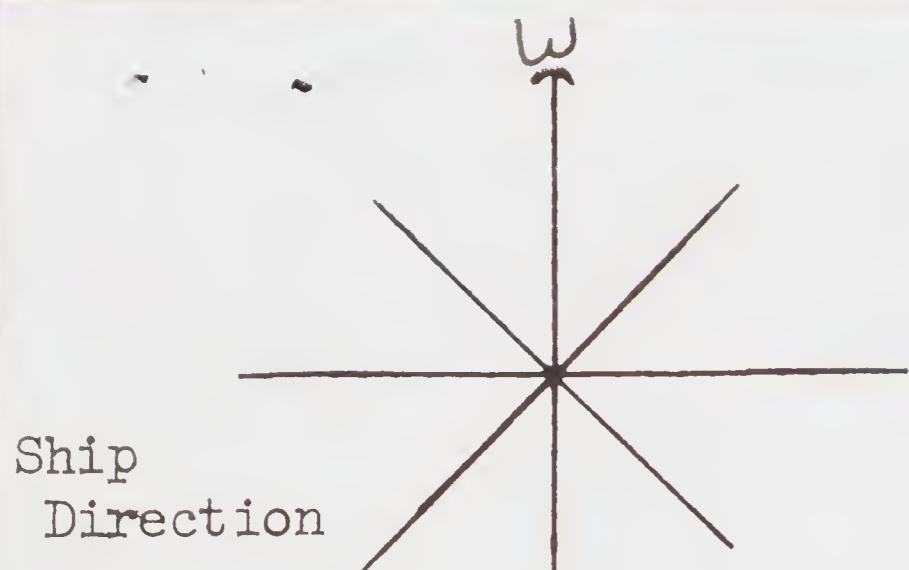
OBSERVERS:

SPECIMEN

or

Date 21 Apr '67
Pg. # 2

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
1411	RP	1	SW		high (150')
1415	WRSP	1	ee		
1431	RP	2			on H2O
1435	WRSP	1	ee		
1446	Tropic. AP	1			-on H2O
1500					Arrive point D.
1515					skiff over
1520	BFA	5			all w/dark rump, one w/injured leg
1545					SKIFF IN
1550	JAEGER	2			1 light (Pomarine), 1 dark (?); flushed from H2O
1553	RED PHAL.	2	5		
1645	WRSP	1	ee		
1655	W. Gull	3	ee		1 call TIZ 2 h, t hot flew away ^w Adults
1657	BFA	18	ee		
1755	BFA				Following
1822	R. Phal. Shortbills	4			Following - 1 w/injured leg.
		15	*w		7 in nuptial plumage, red half way.
1836					Sunset, close observations



OBSERVERS:

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

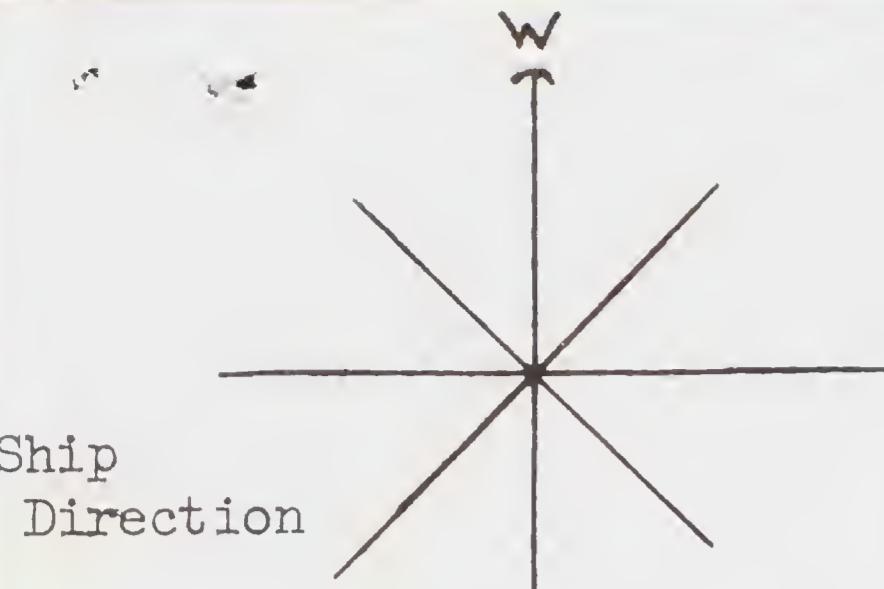
SPECIMEN

or

TIME SPECIES # DIR. BAND NO. REMARKS

Date 21 Apr '67
Pg. # /

2045					Begin
2215	BF A	1			
	SP	1			
2245					close



Ship
Direction

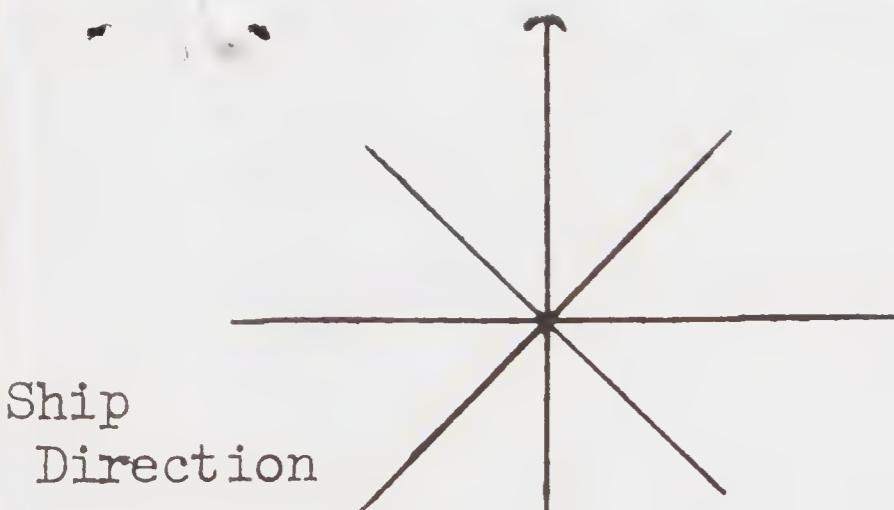
SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

SPECIMEN GRID
or

Date 22 APRIL 1967
Pg. # 1

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
0537					SR; begin ds.
0615	WRSP	1	D		
0640	BFA	1			dark rump; following
0647	R Phal.	3			on H ₂ O
0707	B FA	1			white rump; following
0757	"	3			"
0842	B Phal	18			" one with white rumps
0852	SPet.	1	OO		breeding Phalarope
0910	R. Phal	30 [±] 5	W		
0920	"	6			high
0940					change course to 090: heading for
1045	WRSP	2	D		port for repair.
1159	R phal	1			on H ₂ O
1214	Sm. Pterod.	1	OOO		light underwing, distinct "m" pattern on wing,
1220	WRSP	2	OOO		Probably P. cookii.
1235	R. Phal	3			on H ₂ O
1238	WRSP	1	OOO		
1245					Baird's Porpoise - 2
1315	B FA	2			following, (with white rump)
1326	WRSP	1	D		
1330					Temporary repair completed, resume track W
1450	R. Phal	1	SW		
1510	WRSP	1	OO		
1530	P. cookii?	1	IV		
1531	WRSP	2	OOO		
1602	R.P.	100 [±] 25			on H ₂ O
1603	WRSP	1	D		
1632	WRSP	2	D		
1651					Porpoise (6-8) 33-20
1736	WRSP	1	OO		
1745	R P	200 [±] 50	D		on H ₂ O
1755	"	250 [±] 25	OO		
1757	WRSP	1	OO		white below dark above
1806	Small pt	1	OO		
1803	Kanty Market	2	AA		On H ₂ O 1 Cull TJJ
1830	"	2	AA		
1837	WRSP	1	OO		Sperm Whale 3 33-21
1840	BFA	3			1 w/white rump 123-50
1851					Sunset - close observation



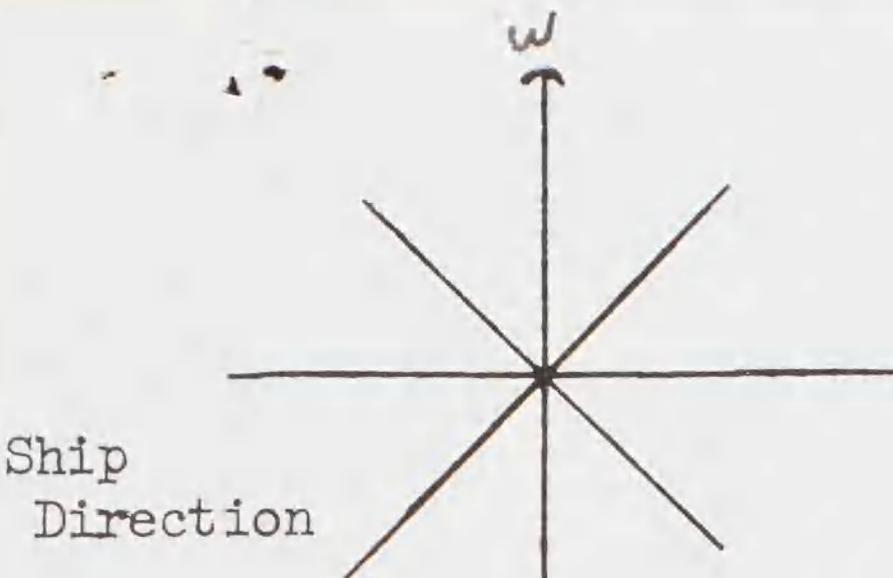
OBSERVERS:

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

SPECIMEN *Nocturnus Guid*
or

Date 22 April 67
Pg. # 1

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
2045					Begin observations
2245					Close "



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

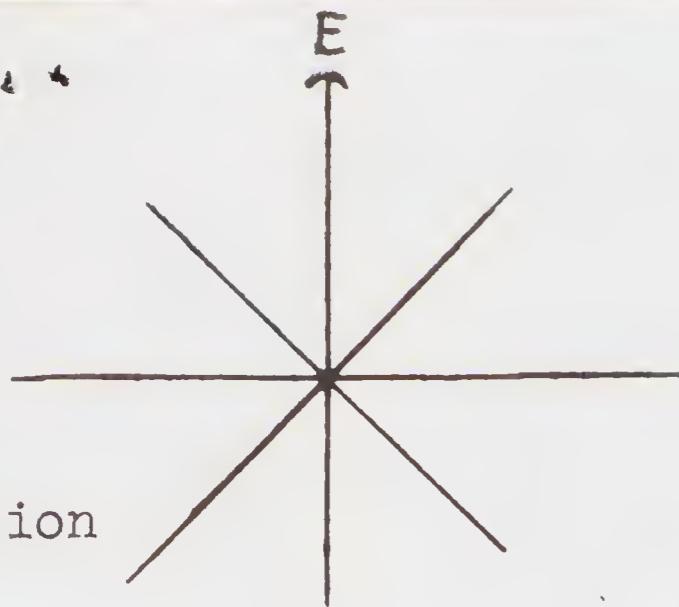
OBSERVERS:

SPECIMEN
or

Date 23 April 1967
Pg. # 1

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
0544					SUNRISE, begin observations
0600	S/sl	1	NW		light underwings
0615					
0749	Bird	1	OO		Sperm Whale - 1 breaching: ca. 3/4 of body came out of H ₂ O. <u>33-24 125-36/</u>
0752	P.cookii ?	1	OO		close - very white underwing, con-color head & back, distinct "W" pattern, White patches on dorsal surface of wing probably caused by molt. Flight distinctive - a cross 'tween pterodroma and p. puffinus.
0756	P.cookii'	1	OO		
0813	"	1	O		same marks as 0752 except less white on upper wing
0827	R.Phal	1	O		distant, but brilliant white underwing
0836	Pters. sp.	1	O		
0859	Phal. sp.	1	O		distant distant; distinct white patches on dorsal surface of primaries
1027	Stn. Pterodroma	1	OO		
1030	P.cookii ?	5			on H ₂ O
1130					change course to 180
1222	R.Phal	1	OO		
1230	"	1	OO		on H ₂ O "
1304	WRSP	1	O		
1317	BFA	1	OO		
1344	WRSP	1	O		
1440	S/sl	1	W		
1450	BFA	1	O		
1512	WRSP Lochs	1	OO		Cull TDL
1600	WRSP	1	O		on H ₂ O
1615	WRSP	2	3		on H ₂ O
1640	P.cookii ?	1	3		on H ₂ O
1700	R.Phal.	1	O		
1705	BFA	1			CC To E.
1827	WRSP	1	O		Following
1830	BFA	1			following
1850	Phal. sp.	1	O		
1859					SUNSET; close to.

Ship
Direction



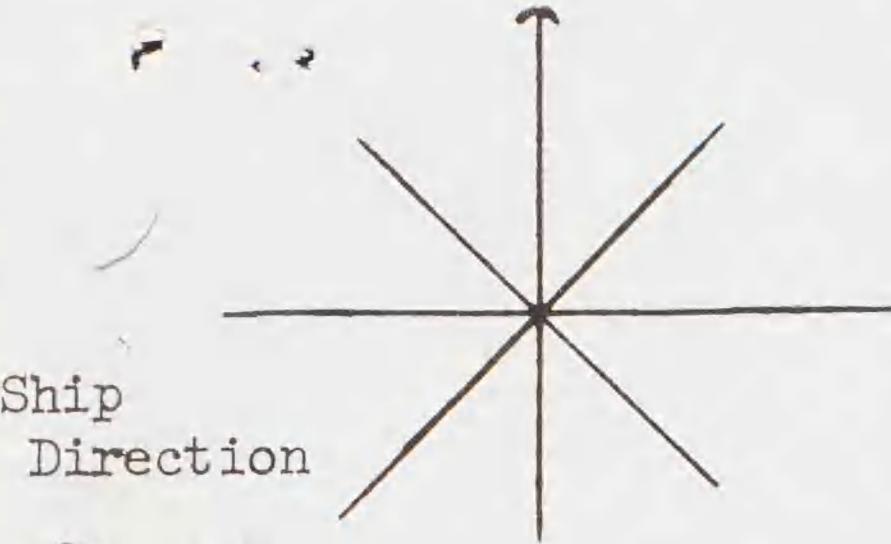
SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

SPECIMEN NOCTURNAL GRID
or

Date 23 APRIL 1967
Pg. # 1

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
2330					begin obs.
2355	BFA	1			following
2357	BIRD	1			
0130					loop obs.



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

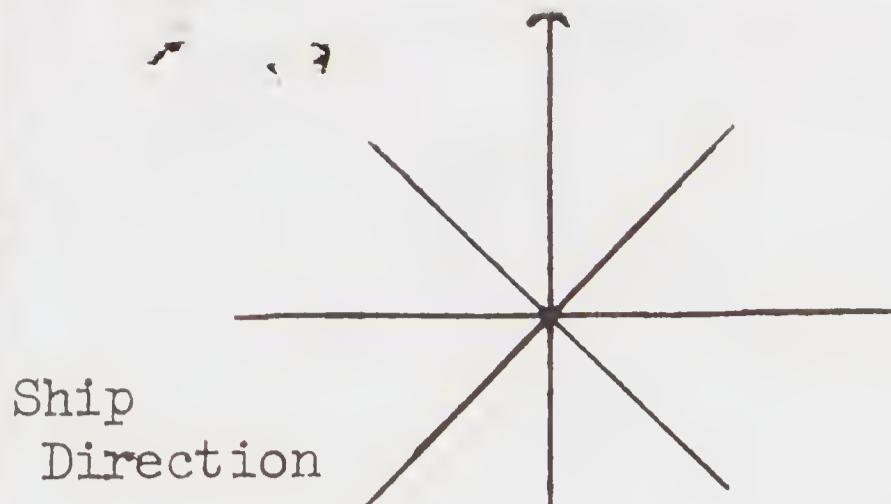
OBSERVERS:

SPECIMEN
or

Date 24 April 67
Pg. # 1

TIME SPECIES # DIR. BAND NO. REMARKS

0529					
0607	WRSP	1	ee		sunrise beginning of observation
0635	BFA	1	ee		Following
0700	WRSP	1	ee		
0718	P. Cookii?	1	ee		
0725	R. Phal	1	w		con color head & back, distinct fairly wide black border on wing white below.
0830	Storm Pet	1	w		
0843	WRSP	1	ee		
1015	"	1	E		
1058	R. Phal	1	N		
1102	Little Bird	1	ee		
1105	Boob				Baird's Dolphin 3 - [32-27 123-10]
1131	WRSP	1	ee		
1140	WRSP	1	ee		
1152	WRSP	1	ee		
1152	BFA	2			both w/dark rump, following
1233	PTERO. SP.	1	N		distant
1245	WRSP	1	O		
1255					KILLER WHALE (1) - [32-26 122-53]
1315	R. Phal	1	ee		
1333	"	1	ee		
1350	WRSP	5	a		on H ₂ O
1432	R. Phal.	2			"
1442	"	1	ee		on H ₂ O
1547	R. Phal.	1	ee		
1630	Bird	1	N		
1637	R. Phal	2	ee		
1730	Laysan Alb.	1	a		on H ₂ O
	BFA	1			Following, very light pink bill.
1731	R. Phal	15 ⁵⁵	s		
1732	R. Phal	9			on H ₂ O
1739	"	2			"
1745					man-o-war jelly fish getting thicker since
1800	Phal. sp.	4			
1813	BIRD	1	O		1600 flushed from H ₂ O south
1815	WRSP	1	O		
1830	BFA	3			
1830	LAYSAN	1			{ following; BFA 2 dark rump, white
1840	BFA	5			{ following sunset; close to land.
1840	LAYSAN	1			
1844					



OBSERVERS:

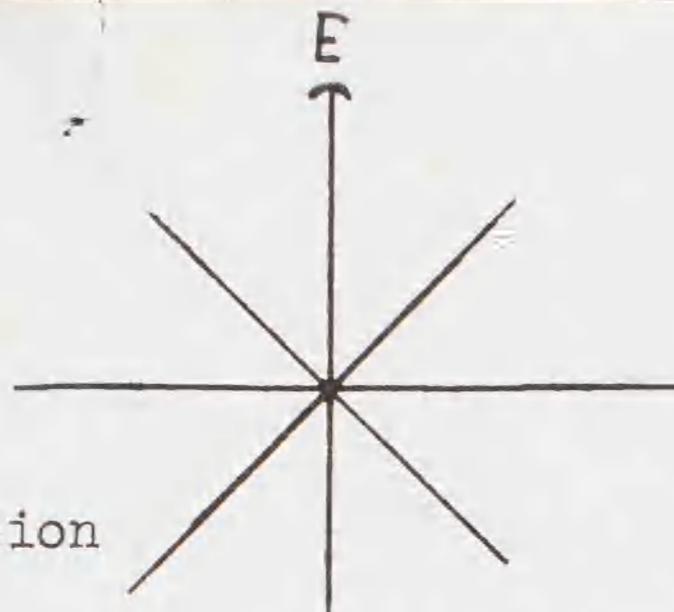
SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

SPECIMEN *Nocturnal Grid.*
or

Date 24 ~~25~~ Apr '67
Pg. # 1

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
0840 2040					
2145 0945	Albatross	1			begin.
2155 955	bird	1			
2230	Phalarope	3			

Ship
Direction



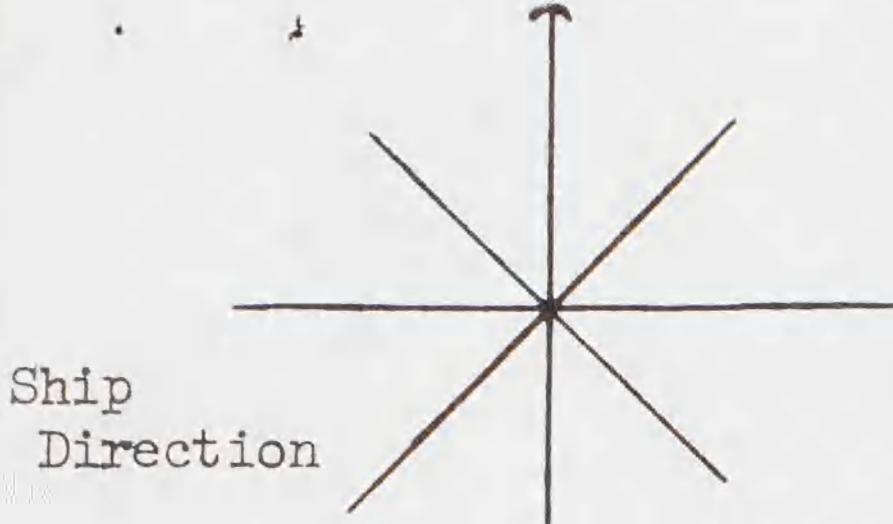
SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

SPECIMEN DIURNAL NON-GRID
or

Date 25 APRIL 1967
Pg. # 1

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
0520					SUNRISE, BEGIN OBS.
0540	BFA	3	NE		Following.
	Laysan A	1	NE		"
0550	BFA	4			" , all w/ dark rump.
0600	BFA	5			" one w/ dark white rump.
0609	Gull sp.	1			
0610					not well seen; small with distinct white areas in wing: No other field marks seen.
0624	BFA	8			Seal sp. - 32-42 119-55
0730	S/SI	2	NE		1 w/dark rump.
0731	S/SI	6	NE		light underwing
0732	S/SI	4	NE		L U W
0736	BFG	8			L U W
0736	W. Gull	1			Follow
0737	S/SI	5			Imm.
0744	S/SL	6	NE		NE - light underw.
0745	S/SI	3	NE		light underwings
0747	S/SI	2	NE		L U W
0750	"	2	E		primary molt, light underwing
0755	"	3	NE		
0757	Sabine's Gull	2	NE		
0759	S/SI	1	E		
0800	Blue-footed Booby	1	NE		good look close -
0805	S/SI	2	E		
0807	"	2	E		
0810	"	8	NE		
0812	"	5	E		
0812					Seal (1) 32-50 119-35
0816	"	20	E		
0817	"	1	E		separate sightings
0820	"	30±5	E		heavy molt in progress
0820	"	23	E		
0821	"	4	E		
0824	"	6	E		



Ship
Direction

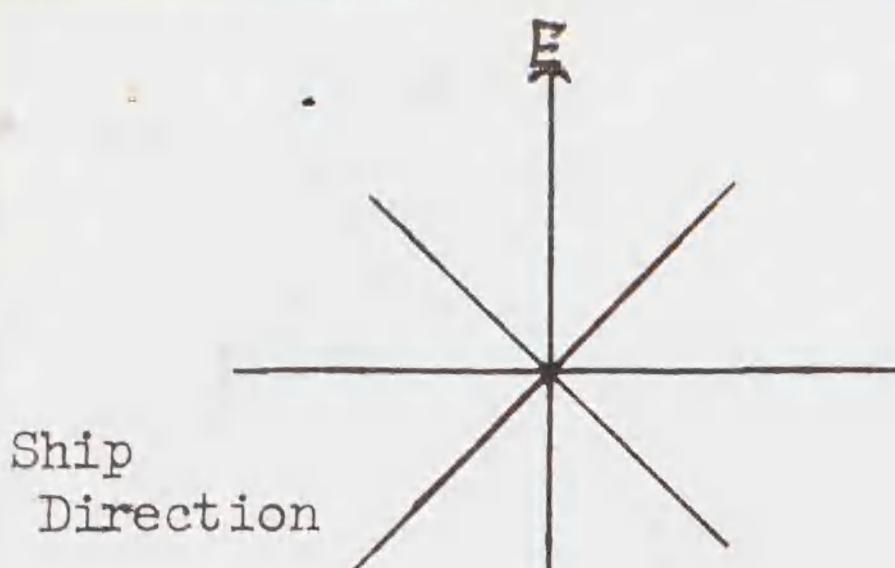
SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

Date 25 April
Pg. # 2

SPECIMEN
or

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS	
0826	S/SL	6	E			
0827	Gull sp	1	E			
0828					Tern sperm whale	
0829	S/SL	60±10	SE			1 32-49 119-31
0830	"	13	E			
0831	"	?	E			
0833	L.T. Jaeger	1	S			
0834	P. creatopus	1	NE			Toward large flock of S/SL
0837	N. Phal	7	NE			
0839	S/SL	4	E			on land
0841	S/SL	41	E			
0842	S/SL	4	E			
0845	"	150±25	E			
0850	L.A	2	SW			following ship
0851						
0851	S/SL	50±10	SE			Seal — 32-46 119-25
0853	R. Aud Slet	2	NE			
0855	Gull sp	1				on the go
0857						
0859	S/SL	200±25	NE			Seal (2) S. sub
0904	S/SL	100±25	NE			2 kind of moving SE
0915	S/SL	60±10	NE			
0916	W GULL	1	NE			
F 0920	S/SL	100±25	NE			
	P. Geographus	2	NE			
	Pom. jaeger	1	NE			
0921						
0925	S/SL	40±5	NE			Dall Porpoise (5); riding low wave
0927						
0928	S/SL	200±25	NE			seal ops. - 32-47 119-20
0928	Pink Foot	4	NE			
0930	Pom. jaeger	1	N			
0931	Tern sp.	2	N			
0932	Gull sp.	2	NE			
0933	Jaegrop.	1	N			
0934	Pink Foot	2	NE			
0934	S/SL	150±20	NE			
0935	Jaegrop.	2	N			
0936	Pink Foot	2	N			
0937	R. Phal.	4	N			
0940	S/SL	50±10	NE			



Ship
Direction

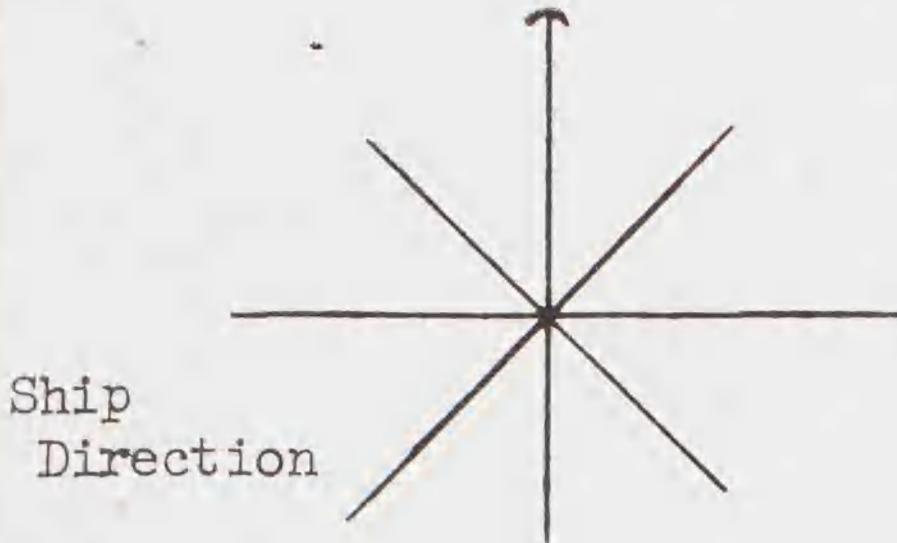
SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

Date 25 APRIL 1967
Pg. # 3

SPECIMEN
or

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS	
0941	Jayg. sp.	2	E		1 light, 1 dark	
0945	Pom. Jayg.	1	E		BEAUTIFUL, PRISTINE LIGHT Ph.	
0946	H. GULL	2				
0947	GULL. SP.	1			up from H ₂ O, following	
0948	S/S/L	30±5	O		1 mm.; distant	
0950	H GULL	1	O			
0955	S/S/L	50±10	O		Ad.; up from H ₂ O, following	
0957	Jayg.	13			3 light ph. Pom. 2 dark ph. Pom. rest? 119-14	32-49
1010	Pink Pink-foot	1			circling above porpoise (2) (sp.?)	
	Sooty	3			and whale on H ₂ O	
	Cal. GULL	1				
	W. GULL	1				
1010					Hubb's beaked whale - well viewed off side of ship. "Foundering" at surface on side: Lateral fin twice broke & surface. White "nose" seen and dorsal fin. white on top of head. ca. 15' long.	30'
1010	Pom J.	1			close: light	32-50
1015	S/S/L	6	O			119-20
1015	Jayg. sp.	1				
1020	Sabine G.	3	N		1 w/black head	
1022	Pink-foot	1	O			
1022	Pom J.	1	O			
1024	Sabine G	1	N		black head	
1027	S/S/L	9			on H ₂ O	
1030	Jayg sp	1	N		dark	
1035	Pom J	1			dark on H ₂ O	
1036	W. Gull	2	O		1 ad, 1 imm	
1037	S/S/L	2	O			
1044	P. cretopus	19				32-52 119-06
	Soot/S/L	24			on H ₂ O	
1050	S/S/L	4	O		cal sea 1 imm 2	
1050	Jayg. sp.	1	O			
1054	S/S/L	35±5			on H ₂ O	
	Pink-foot	20±5				
					seals (cal sea L. 2)	32-53 119-05
1055	H.G.	1			imm.	
1056	S/S/L	8			on H ₂ O	
	Pink-foot	4				
1058	W. Gull	4			3 imm, 1 ad	
1058	S/S/L	7				
	Pink-foot	1				



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

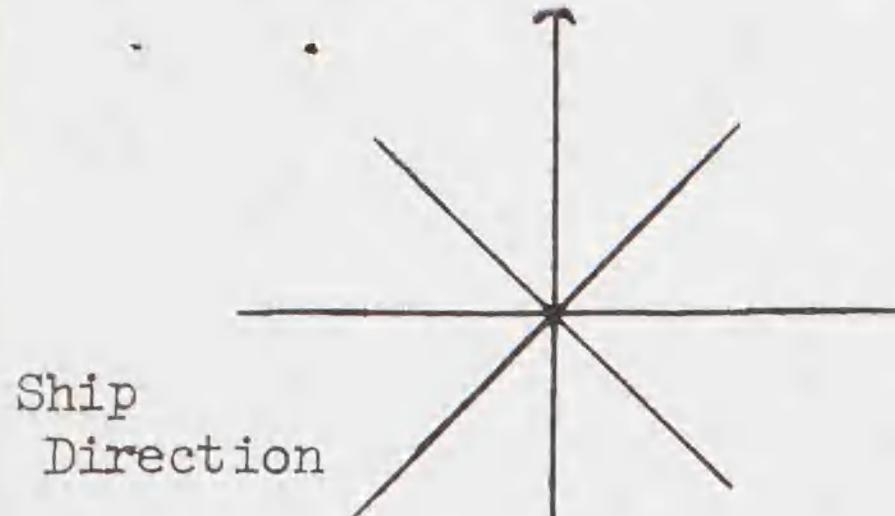
OBSERVERS:

Date 25 Apr
Pg. # 4

SPECIMEN
or

TIME SPECIES # DIR. BAND NO. REMARKS

1100	Pom J	1	N	light
1102	S/S/	3	ØØ	
1103	S/S/	24		
1104	S/SL	4		on H ₂ O
	Pink-foot	1		on H ₂ O
1113	S/S/	3	ØØ	
1113	Taey sp	1	↑	
1114	S/S/	50±5	ØØ	
	Pom Jaeger	1		on H ₂ O
1117	S/S/	30±5		Forcing sandy to dive beneath water under for 4 or 5 seconds while P Jaeger waited above
1125	Pink-foot	2	ØØ	on H ₂ O
1126	W. Gull	1	ØØ	Imm.
1127	S/S/	2	ØØ	on H ₂ O
1127	Pink-foot	1	N	
1129	Pom Ja	2	ØØ	on H ₂ O light ph. ad
1130	Pink-foot	3	N	
	S/S/	1	ØØ	
1133	"	4	NE	
1317	Cormorant	1	ØØ	on H ₂ O
1205	CAL. GULL	2		on H ₂ O
1208	POM. JAEGER	1	E	Imm.; following
1222	S/S/Ls	1	N	light ph.
1235	"	1	S	
1244	"	1	S	
1245	GULL SP.	1	S	
1250	"	1	S	Imm.
1251	"	1	E	
1256	SOOTY/Sb	2	N	ad. sitting on H ₂ O
1302	CORMORANT	1		
1310	Pink-foot	1	ØØ	flushed from H ₂ O 5
1310	Gull sp	1		
1311	W. Gull	1		imm., distant
1315	Pink foot	4		ad on H ₂ O
	S/S/	3		on H ₂ O
1315	Pink-f.	5		on H ₂ O
	S/S/	19		
1318	Pink-foot	9		on H ₂ O
1326	Pelagic Corm.	1		on H ₂ O
1327	S/S/	2	ØØ	
1330	W. Gull	3		imm.



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

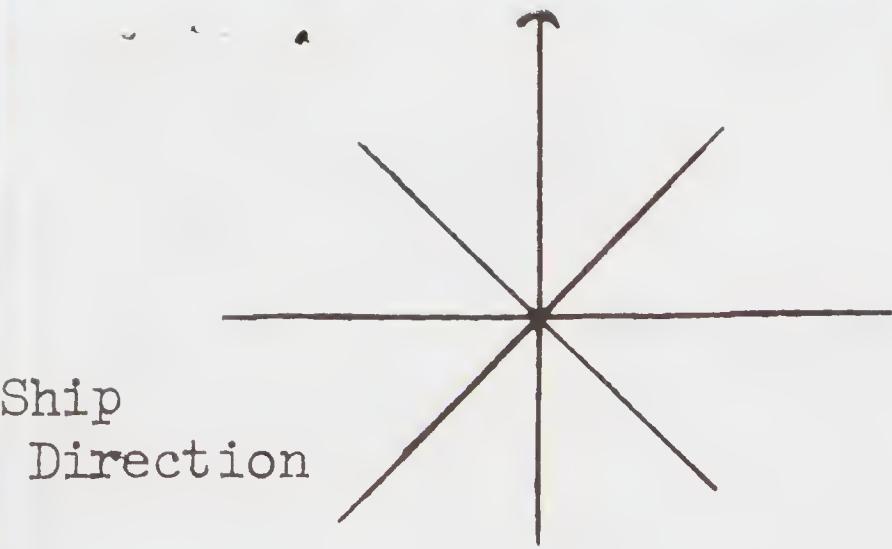
Date 25 Apr '67
Pg. # 5

SPECIMEN

or

TIME SPECIES # DIR. BAND NO. REMARKS

1338	S/SI	1	NE	
1338	W.Gull	1	NE	
1343	S/SI	1	NE	ad.
1344	Pink-foot	1	NE	
1356	S/SI	1	NE	
1410	Hummingbird	1	NE	
1417	Loon	1	N	Toward California Is.
1424	W. Gull	1	NE	
1430	S/SI	2	NE	Ad Following
1431	"	3	NE	
1435	Pink-foot	1	NE	
1442	S/SI	1	NE	
1443	Gull sp	1	NE	
1452	Pink-foot	2	NE	Imm
1455			NE	on H2O flushed to N
1500	Gull sp	1	NE	Aircraft carrier landed 4 Birds, took in one
1500	Swallow	1	NE	On Keel Ad
1505	BFA	1	NE	circling ship
1508	W. GULL	1	NE	following
1509	S/SI	2	E	ad.
1522	CORMORANT	1	W	
1527	S/SI	2	W	
1528	GULL SP.	2	W	
1535	Cal. Gull	1	E	Imm.
1542	GULL SP.	3	W	Ad. following
1545	"	1	NE	Imm., distant
1547	TERN SP.	1	NE	Landed (?) on shore Santa Catalina
1552	H. GULL	1	W	
1610	Gull sp	60	NE	on H2O
	Br. Pelican	1	NE	"
1610	Bonap. Gull	1	NE	"
1615	Cal. Gull	130	NE	ad.
1615	Gull sp	50 ⁴⁰	NE	on H2O, 100 immatures
1615	Br. Pelican	4	NE	"
1616	"	8	W	on H2O



Ship
Direction

OBSERVERS:

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

SPECIMEN

or

Date 25 Apr '67
Pg. # 6

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
1637	Loon sp	2	NW		
1642	Bonap. Gull	23	NW		travelling Flock adults
1646	S/SI	1	(Q)		
1651	S/SI	1	(Q)		white underwing
1651	W. Gull	4	(Q)		Imm
1652	Cal Gull	1			ad on H ₂ O
1658	W Gull	2	(Q)		
1704	Cul. Gull				Ad
1710	Gull sp	1	(Q)		Ad - following
1720		1	(Q)		Ad
					close observation

Date 18 APR 1967 Ship SHEARWATER (TAG 177) Cruise No. 177-67-06

Organization P.O.B.S.P. Recorder _____

Sunrise: Time _____ Position: Lat. _____, Long. _____

Sunset: Time 1828 Position: Lat. 33° 58', Long. 118° 57'

Miles travelled from 0000 hours to sunrise = _____

*Miles travelled from sunrise to sunset = _____

*Miles travelled from sunset to 2400 hours = _____

	TIME OF FIX	TYPE OF FIX	LATITUDE	LONGITUDE
1.	Departure Los. Angles.	1430 hrs.	$33^{\circ} 42' N$	
2.	Hourly Fixes by Land Bearing			$118^{\circ} 15' W$
3.				
4.			$3^{\circ} 7'$	
5.				

Hourly Positions:

Time	Latitude	Longitude	Wind Dir.	Wind Sp.	Wave Dir.	Wave Hgt.
------	----------	-----------	-----------	----------	-----------	-----------

0100						
0200						
0300						
0400						
0500						
0600						
0700						
0800						
0900						
1000						
1100						
1200						
1300						
1400	$33^{\circ} 42' N$	$118^{\circ} 15' W$				
1500	$33^{\circ} 43' N$	$118^{\circ} 18' W$				
1600	$33^{\circ} 44' N$	$118^{\circ} 28' W$	190	14	190	3
1700	$33^{\circ} 45' N$	$118^{\circ} 40' W$	200	15	200	3
1800	$33^{\circ} 54' N$	$118^{\circ} 50' W$	240	15	240	3
1900	$33^{\circ} 57' N$	$118^{\circ} 52' W$	240	18	240	4
2000	$34^{\circ} 00' N$	$118^{\circ} 09' W$	080	5	240	2
2100	$34^{\circ} 08' N$	$119^{\circ} 21' W$	270	10	270	3
2200	$34^{\circ} 10' N$	$119^{\circ} 32' W$	270	10	270	3
2300	$34^{\circ} 13.5' N$	$119^{\circ} 45' W$	270	10	270	3
2400	$34^{\circ} 16'$	$119^{\circ} 54.5' W$	270	10	270	3

Date 19 APR - 6-7Ship DEEPWATER (T-Ag 177)Cruise No. 177-67-06Organization P.O.B.S.P.

Recorder _____

Sunrise: Time 0529Position: Lat. 34° 13' N, Long. 120° 05' WSunset: Time 1848Position: Lat. 34° 58' N, Long. 123° 11' WMiles travelled from 0000 hours to sunrise = 52Miles travelled from sunrise to sunset = 119Miles travelled from sunset to 2400 hours = 55 miles

	TIME OF FIX	TYPE OF FIX	LATITUDE	LONGITUDE
1.	1A.M.	LORAN & SUN		
2.	1400	LORAN & SUN		
3.	1900	STAR FIX		
4.	Hourly	LORAN Line		
5.				

Hourly Positions:

Time	Latitude	Longitude	Wind Dir.	Wind Sp.	Wave Dir.	Wave Hgt.
------	----------	-----------	-----------	----------	-----------	-----------

0100	34-19	120-10	220	12	290	4
0200	34-22	120-26	220	16	290	4
0300	34-24	120-32	220	15	290	4
0400	34° 27' N	120° 40' W	220	15	290	4
0500	34° 31' N	120° 49' W	220	12	260	4
0600	34° 35' N	121-00 W	240	12	270	4
0700	34° 39' N	121-09 W	245	14	260	4
0800	34° 43' N	121-17 W	245	14	210	3
0900	34-47 N	121-28 W	270	10	270	
1000	34-51 W	121-38 W	270	10	270	3
1100	34-54 W	121-46 W	270	10	270	4
1200	34-55 N	121-57 W	270	10	270	4
1300	34-59 N	121-10 W	275	12	275	4
1400	34-59 N	121-21 W	275	13	275	4
1500	34-59 N	122-42 W	275	12	300	12 (5w)
1600	34-42 N	122-32 W	280	280/10	300	12 (5w)
1700	34-57 N	123-05 W	300	10	315	4
1800	34-57 N	123-04 W	325	7	315	4
1900	34° 53' N	123° 14' W	300	7	315	3
2000	34-55 N	123-54 W	325	8	315	2
2100	34-58 N	123-39 W	LT. AIRS		CALM	
2200	34-58 N	123-51 W	LT. AIRS		CALM	
2300	34-58 N	124-04 W	LT. AIRS		CALM	
2400	34-58 N	124-16 W	LT. AIRS		CALM	

10 Foot SWELL 4 SWELLS

1240 - ARRIVED
PT. ASH - COURSES
270°(E)

8 FT SWELL - 300

958b-SI-MNH
Rev. 9/28/66

Date 20 April 1967 Ship Shearwater (TAN 177) Cruise No. 177-67-06
 Organization P.O.B.S.P. Recorder _____

Sunrise: Time 0545 Position: Lat. 35° 02' N Long. 125° 22' W

Sunset: Time 1858 Position: Lat. 34° 12' N, Long. 125° 48' W

Miles travelled from 0000 hours to sunrise = 55

Miles travelled from sunrise to sunset = 128

Miles travelled from sunset to 2400 hours = 55

	TIME OF FIX	TYPE OF FIX	LATITUDE	LONGITUDE
1.	0530	KOLAN + STAR	35° 02' N	125° 19' W
2.	0700	R. FIX	35° 02' N	125° 35' W
3.	NOON FIX	KOLAN & SUN LINE, RETRACTED LASH		
4.				
5.				

Hourly Positions:

Time	Latitude	Longitude	Wind Dir.	Wind Sp.	Wave Dir.	Wave Hgt.
------	----------	-----------	-----------	----------	-----------	-----------

0100	35-00 N	124-26 W	260	5	260	CALM
0200	35-00 N	124-37 W	LT AIRS	-	-	"
0300	35-00 N	124-50 W	280	5	280	"
0400	35° 01' N	125° 03' W	290	7	280	3
0500	35° 02' N	125° 15' W	290	7	280	3
0600	35° 02' N	125° 26' W	290	7	280	3
0700	35° 02' N	125° 35' W	LT. AIRS	280	1	
0800	35° 01' N	125° 50' W	LT. AIRS	260	1	
0900	35-00 N	126-03 W	295	12	295	3
1000	35-00 N	126-26 W	295	12	295	3
1100	34-49 N	126-21 W	300	18	295	5
1200	34-39 N	126-21 W	300	20	295	5
1300	34-35 N	126-13 W	290	17	290	5
1400	34-30 N	126-23 W	280	15	280	5
1500	34-20 N	126-28 W	280	15	280	5
1600	34-13 N	126-28 W	280	15	280	5
1700	34-12 N	126-10 W	270	12	280	4
1800	34-12 N	125-58 W	270	14	280	3
1900	34-12 N	125-47 W	260	15	240	2
2000	34-11 N	125-35 W	260	15	240	2
2100	34-10 N	125-20 W	280	16	280	4
2200	34-10 N	125-08 W	280	16	280	6
2300	34-10 N	124-52 W	280	16	280	6
2400	34-10 N	124-41 W	280	16	280	6

Date 21 APR 67Ship SHEARWATER (TAG 171)Cruise No. 177-67-06

Organization _____

Recorder _____

Sunrise: Time 0537Position: Lat. 34° 13' N Long. 123° 21' WSunset: Time 1839Position: Lat. 33° 38' N Long. 121° 21' WMiles travelled from 0000 hours to sunrise = 53Miles travelled from sunrise to sunset = 139Miles travelled from sunset to 2400 hours = 55

	TIME OF FIX	TYPE OF FIX	LATITUDE	LONGITUDE
1.	0500	CESTIAL		
2.	Hourly sun lines with Loran			
3.	ZAN RECALLED WITH LORAN & SUNLINE FOR NOON			
4.				
5.				

Hourly Positions:

Time	Latitude	Longitude	Wind Dir.	Wind Sp.	Wave Dir.	Wave Hgt.
------	----------	-----------	-----------	----------	-----------	-----------

0100	34-08N	124-28W	275	30	275	6
0200	34-08N	124-10W	265	15	265	5
0300	34-10N	123-58W	280	15	265	5
0400	34° 13' N	123° 42' W	280	14	265	3
0500	34° 13' N	123° 39' W	280	14	265	3
0600	34° 13' N	123° 14' W	280	14	265	3
0700	34° 12' N	123° 03' W	280	14	285	4
0800	34° 12' N	122° 51' W	265	15	285	4
0900	34° 12' N	122° 38' W	275	14	275	4
1000	34° 12' N	122° 25' W	275	14	275	4
1100	34° 11' N	122° 15' W	275	14	275	5
1200	34° 10' N	122° 04' W	275	14	275	5
1300	34° 11' N	121° 48' W	270	12	270	5
1400	34° 12' N	121° 31' W	265	12	265	5
1500	34° 10' N	121° 20' W	250	12	250	6
1600	34° 01' N	121° 20' W	245	12	245	6
1700	33° 49' N	121° 21' W	210	12	240	4
1800	33° 40' N	121° 22' W	270	12	240	3
1900	33° 31' N	121° 20' W	240	18	240	3
2000	33° 20' N	121° 20' W	210	10	240	3
2100	33° 22' N	121° 40' W	270	16	270	4
2200	33° 20' N	121° 52' W	270	16	270	4
2300	33° 20' N	122° 03' W	270	16	270	5
2400	33° 20' N	122° 14' W	270	16	270	5

CK TO 180

CK TO 270

Date 22 NOV 67Ship SUPERINTENDER (T-AGM-1)Cruise No. 177-67-06

Organization _____

Recorder _____

Sunrise: Time 0536Position: Lat. 33° 25' N, Long. 122° 58' WSunset: Time 1851Position: Lat. 33° 22' N, Long. 124° 55' WMiles travelled from 0000 hours to sunrise = 44Miles travelled from sunrise to sunset = 99Miles travelled from sunset to 2400 hours = 45

	TIME OF FIX	TYPE OF FIX	LATITUDE	LONGITUDE
1. HOURLY FIX DURING NIGHT, LORAN RATES 2H1 & 2H2.				
2.	0500	CELESTIAL	33° 25' N	122° 58' W
3. 1207 1200-1200 Sonde 100				
4.	1208 1400-1500 Sonde 105-1500 Sonde 108 - 2H2 Loran			
5.	1900	CELESTIAL & LORAN	33° 22' N	124° 55' W

Hourly Positions:

Time	Latitude	Longitude	Wind Dir.	Wind Sp.	Wave Dir.	Wave Hgt.
------	----------	-----------	-----------	----------	-----------	-----------

0100	33-19 N	122-23 W	280	12	280	* 7
0200	33-19 N	122-33 W	280	16	280	* 8
0300	33-18 4	122-42 W	280	15	280	* 8
0400	33-17 N	122-50 W	280	15	280	* 8
0500	33° 25' N	122° 58' W	300	11	290	5
0600	33 25 N	123 07 W	330	15	290	5
0700	33 25 N	123 15 W	330	15	290	5
0800	33 24 N	123 22 W	330	15	300	5
0900	33-23	123-30 W	300	14	300	6
1000	33-21	123-37 W	300	14	300	6
1100	33-21	123-22 W	300	14	300	6
1200	33-20 N	123-10 W	270	15	270	5
1300	33-20 0	123-00 W	280	10	250	5
1400	33-20 N	123-05 W	300	10	250	5
1500	33-20 N	123-16 W	270	5	270	5
1600	33-20 N	123-16 W	LT AIRS		KNOBS	
1700	33-20	123-37 W	270	10	270	3
1800	33-20	123-44 W	220	10	260	2
1900	33-22	123-55 W	215	10	270	3
2000	33-22	123-35 W	205	14	220	2
2100	33-21	124-17 W	225	14	215	4
2200	33-21	124-28 W	225	14	215	4
2300	33-21	124-38 W	215	18	215	5
2400	33-21	124-47 W	215	20	215	5

* CHANGED
SEA #5000
10-12' MW by
5000 ft
0941-1330
On 085 WWT
085-100-600
12-201-02
REVERSE GEAR
ASSIGN 0133-0

Date 25 APRIL 1967 Ship L.S.N. SNEAKAWA (T-AGL 77) Cruise No. 177-67-06

Organization _____ Recorder _____

Sunrise: Time 0530 Position: Lat. 32°38'N, Long. 120°03'W

Sunset: Time _____ Position: Lat. _____, Long. _____

Miles travelled from 0000 hours to sunrise = 47

Miles travelled from sunrise to sunset = 107 to close of job.

Miles travelled from sunset to 2400 hours = _____

	TIME OF FIX	TYPE OF FIX	LATITUDE	LONGITUDE
1.	0500	CELESTIAL	32°37'N	120°07'W
2.				
3.				
4.				
5.				

Hourly Positions:

Time	Latitude	Longitude	Wind Dir.	Wind Sp.	Wave Dir.	Wave Hgt.
------	----------	-----------	-----------	----------	-----------	-----------

0100	32°31'N	120°-50'W	315	22	325	10
0200	32°-32'N	120°-44'W	315	23	325	10
0300	32°-33'N	120°-34'W	315	24	325	10
0400	32°34'N	120°18'W	315	25	325	10
0500	32°37'N	120°02'W	315	25	325	10
0600	32°41'N	119°57'W	315	25	325	10
0700	32°47'N	119°46'W	315	25	325	10
0800	32°51'N	119°37'W	315	25	325	10
0900	32°45'N	119°23'W	315	25	325	10
1000	32°49'N	119°14'W	315	22	325	10
1100	32°53'N	119°04'W	315	22	325	10
1200	32°56'N	118-55'W	315	22	325	10
1300	32-58'N	118-51'W	315	20	325	10
1400	33-01'N	118-42'W	310	18	300	8
1500	33-17'N	118-25'W	300	16	300	6
1600	33-12'N	118-18'W	295	8	295	7
1700	33-24'N	118-15'W	300	10	290	1
1800	33°33'N	118°14'W	300	10	290	1
1900	ARRIVAL	LONG BUNCE N SEA BUN				
2000						
2100						
2200						
2300						
2400						

-Lee of Colabia
& Channel Isls.

14/12

13/12
-
13 42

Date 24 Jan 66 Ship Seafarmer (Tug) Cruise No. 1776106

Organization PACER

Recorder Ship's Bridge

Sunrise: Time 0529

Position: Lat. 32°30'N, Long. 124°07'W

Sunset: Time 1844

Position: Lat. 32°36'N, Long. 124°53'W

Miles travelled from 0000 hours to sunrise = 50

Miles travelled from sunrise to sunset = 116

Miles travelled from sunset to 2400 hours = 45

	TIME OF FIX	TYPE OF FIX	LATITUDE	LONGITUDE
1.	0729	Locational	32°38'N	124°58'W
2.	Noon, 24 Jan 66	1200 Locational		
3.	1804	Locational	32°36'N	124°50'W
4.				* depth gnd at 2400 W attempts to calculate long based on engine speed
5.				

Hourly Positions:

Time	Latitude	Longitude	Wind Dir.	Wind Sp.	Wave Dir.	Wave Hgt.
0100	32-26 N	123-06 W	330	18	330	6
0200	32-25 N	124-41 W	330	17	330	6
0300	32-28 N	124-35 W	330	17	330	6
0400	32-27 N	124-23 W	330	17	330	6
0500	32-28 N	124-11 W	330	14	330	7
0600	32-26 N	124-01 W	330	14	330	7
0700	32-28 N	123-51 W	330	16	330	7
0800	32-28 N	123-42 W	330	16	330	7
0900	32-27 N	123-22 W	330	17	330	5
1000	32-27 N	123-18 W	330	17	330	6
1100	32-27 N	123-10 W	330	17	330	6
1200			330	18	330	6
1300	32-26 N	122-52 W	330	17	330	6
1400	32-27 N	122-43 W	330	17	330	6
1500	32-27 N	122-31 W	345	15	330	6
1600	32-27 N	122-21 W	345	15	330	4
1700	32-27 N	122-12 W	345	15	330	6
1800	32-27 N	122-03 W	340	16	335	6
1900	32-26 N	121-52 W	340	16	335	6
2000	32-26 N	121-39 W	340	16	335	6
2100	32-27 N	121-31 W	340	16	340	6
2200	32-27 N	121-21 W	340	16	340	4
2300	32-28 N	121-11 W	340	16	340	6
2400	32-28 N	121-00 W	340	16	340	6

DEPARTED GUADALCANAL 24 JAN 66 READING PORT

Date 4/23/67 Ship Shearwater (T-AF 177) Cruise No. 177 - 67-06

Organization P.O.B.S.P. Recorder ship's bridge

Sunrise: Time 0544 Position: Lat. 33° 24' N Long. 125° 30' W

Sunset: Time 1859 Position: Lat. 32° 27' N Long. 126° 00' W

Miles travelled from 0000 hours to sunrise = 74

Miles travelled from sunrise to sunset = 107

Miles travelled from sunset to 2400 hours = 42

	TIME OF FIX	TYPE OF FIX	LATITUDE	LONGITUDE
1.	0530	CELESTIAL & LORAN	33° 24' N	125° 28' W
2.				
3.	1900	CELESTIAL & LORAN	32° 27' N	125° 59' W
4.				
5.				

Hourly Positions:

Time	Latitude	Longitude	Wind Dir.	Wind Sp.	Wave Dir.	Wave Hgt.
0100	33° 20' N	124-54 W	270	15	270	5
0200	33° 20' N	125-02 W	270	17	270	5
0300	33-20 N	125-10 W	270	20	270	5
0400	33° 23' N	125° 15' W	270	17	270	5
0500	33° 24' N	125-24 W	250	17	270	5
0600	33° 24' N	125-34 W	235	18	270	5
0700	33° 25' N	125-41 W	250	12	270	5
0800	33° 23' N	125° 57' W	270	12	260	5
0900	33-22 N	126-01 W	295	18	290	6
1000	33-21 N	126-11 W	295	18	290	6
1100	33-20 N	126-17 W	295	25	290	6
1200	33°-10 N	126-25 W	300	15	300	8
1300	33°-01 N	126-33 W	300	17	300	8
1400	32-57 N	126-22 W	300	15	300	8
1500	32-48 N	126-23 W	300	15	300	8
1600	32-40 N	126-25 W	300	15	300	8
1700	32-31 N	126-30 W	300	15	300	5
1800	32-29 N	126-11 W	315	14	300	5
1900	32-27 N	125-59 W	315	14	300	5
2000	32° 27' N	125-58 W	320	15	300	3
2100	32-27	125-37 W	330	14	330	4
2200	32-27	125-26 W	330	14	330	4
2300	32-27	125-15 W	330	14	330	4
2400	32-27	125-05 W	330	14	330	4

1130G/1 To
1800

Fat

PRELIMINARY REPORT

EASTERN AREA CRUISE 7
18-25 April 1967

including
EASTERN GRID SURVEY 6

Prepared by
Brian Harrington

This report is a summary of observations and collections made by P.O.B.S.P. personnel in the eastern Pacific Ocean from 18-25 April, 1967. Participating personnel included Brian Harrington (biologist-in-charge), Richard Heiden, and James Lewis. Superior cooperation was received from the officers and crew of the U.S.N.S. SHEARWATER(T-AG 177). The grid track was followed as accurately as circumstances would allow, but due to mechanical failures of the ship, was not completed. On 22 April deviations from the nominal cruise track were made between points E and F in order to make temporary engine repairs. Instead of continuing west, an east course was taken from 0940 until 1330; at 1330 the course was once again reversed. Thus, a twenty mile portion of the track for the day was traveled three times. Observations over this transect will be discussed in the grid section of this report. Because of further problems with the main engine, none of the grid track between points H and O was surveyed. Instead a direct course to Long Beach was taken from point H..

All positions on this cruise are considered accurate within five miles. Combined LORAN, sunlines and celestial fixes were taken hourly throughout the grid during diurnal hours; at night only LORAN was used.

This report is divided into two sections. The first deals with the grid portion of the cruise while the second covers the non-grid survey.

EASTERN PACIFIC GRID SURVEY
NUMBER 6

The eastern grid survey was conducted from 1240 hours 19 April through 2400 hours 24 April, 1967. Only about two thirds of the

nominal grid track was surveyed. A total of 72.2 hours of diurnal observation was conducted over 649 linear miles. A summary of observations may be found in table 1. An additional 12 hours of nocturnal observation were conducted and are summarized on table 5.

Weather data during the survey were recorded on appropriate forms. In general, winds and seas were moderate; a high pressure center to the north of the grid, and a low pressure center along the California coast influenced the weather throughout the survey. Sea state was not suitable for operation of the skiff, thus reducing collecting capabilities.

Twenty-seven bathythermograph casts were made in the grid. The slides will be sent to Scripp's Institution for analysis.

FLOCKING

As on previous cruises, flocking was not recorded in the grid except for resting groups of Storm Petrels and Phalaropes. Flocking of these species will be discussed in the species accounts.

For purposes of discussion this report is divided into two sections. The first deals with the grid survey while the second summarizes the non-grid portion of the cruise.

GRID SPECIES ACCOUNTS

Black-footed Albatross (Diomedea nigripes) 35 + 4 nocturnal

Density in both the north and central sections was lower than that recorded on the last survey. East-west differences were not as marked as in early April, but were still evident.

An attempt was made to keep track of unusually marked individuals to determine how long they followed the ship. On 21 April two birds were followed closely; one followed about six hours and another for at least thirteen hours. On the 22nd another bird was recorded for more than ten hours.

The numbers of birds with dark upper tail coverts outnumbered those with white or mostly white by 5:1.

Laysan Albatross (Diomedea immutabilis) 1

One bird with an unusually pink bill was recorded in the eastern half of the central section.

Fulmar (Fulmarus glacialis) 0

This is the first eastern grid survey to date on which no Fulmar were seen.

Small Pterodroma (Not positively identified) 50

Judging by the field marks of the small Pterodroma which were well observed, it is felt that virtually all were Pterodroma cookii. Sightings were most common in the western half of the grid, especially on the north leg. Why an equal number was not seen to the south at equivalent longitudes is puzzling. A noticeable decline was recorded between points B and C; thereafter sightings were relatively scarce.

Most of those birds for which direction of travel was noted

were moving rapidly in a northerly direction. A few were seen sitting on the water, usually in the company of a few storm petrels.

Leach's Storm Petrel (Oceanodroma leucorhoa) 114 + 2 nocturnal
Storm Petrel sp. (unidentified) 12 + 2 nocturnal

Probably all of the storm petrels seen on this survey were Leach's, but as similar types could easily be overlooked, they were recorded on the daily log sheets only as white-rumped storm petrels. The density distribution has changed since last cruise, but this behavior has been noted without explanation since January. The general trend of increase in the north section would seem to be indicative of a migratory movement, but no other data were collected which substantiates this. Direction of travel did not follow any obvious pattern, and the variation of local densities would not seem likely if a loose migration was under way.

Red-tailed Tropicbird (Phaethon rubricauda) 2

Both sightings were in the north section; neither bird was attracted to the ship, and in fact both seemed to avoid it.

Glaucous-winged Gull (Larus glaucescens) 0

This is the first grid survey to date on which no Glaucous-wings were seen. The pattern of decline has closely followed that of the Herring Gull.

Herring Gull (Larus argentatus) 4

All sightings were of adults in the north section. The continuing decline of the grid population suggests that breeders are returning to the nesting islands.

Western Gull (Larus argentatus) 4

These were the first sightings for this species in the grid. All were adult birds, and two females collected had enlarged gonads. Although the change of status within the grid does not seem large enough to be significant, it does seem possible that they were migrants based on data collected in the non-grid areas.

Short-billed Gull (Larus canus) 1

The collection of this species constitutes the first grid record. The specimen was a subadult with light fat, and was in the northwest portion of the grid.

Sabine's Gull (Xema sabini) 2

Two were seen in the northeast portion of the grid. All the sightings to date would suggest that along this portion of the coast this species is most apt to occur between 50 and 150 miles of the shoreline.

Pomarine Jaeger	(<u>Stercorarius pomarinus</u>)	1
Long-tailed Jaeger	(<u>S. longicaudus</u>)	1
Jaeger sp.	(Unidentified)	2

All of the grid jaeger sightings were in the eastern half of the north section where they have been frequently noted since January.

Red Phalarope (Phalaropus fulicarius) 927 + 7 nocturnal

The densities of this species have been high and irregular over the last three cruises. During this survey unprecedented numbers were recorded, especially in the central portion of the grid. Their distribution seems to be very local, as was well demonstrated on 22 April. On this day a 20 mile portion of the cruise track was surveyed three times (see report introduction.) During these three transects virtually no Red Phalarope were seen. Yet just to the west (within 20 miles) hundreds were seen along a 20 mile line.

This instance, along with data from former surveys, suggests that the Red Phalarope abundance is quite local, but variable from one cruise to the next.

As weather was not suitable for collecting from the skiff, no specimens were taken in the grid. It was noted that about 20% of the birds appeared to be in complete nuptial plumage. The remaining were in winter or intermediate stages.

Black-bellied Plover (Squatarola squatarola) 1

A single bird thought to be this species was seen in the north-west portion of the grid.

Xantus Murrelet (Endomychura hypoleuca) 2

Two birds were seen together in the eastern half of the central section. One male which was collected had small testes, moderate fat, and was in heavy body molt.

GRID MAMMALS

The numbers of mammals sighted in the survey area declined considerably from previous cruises. This, as emphasized in earlier reports, may have been due to the uncalm seas which were present throughout this survey. However, as no method of weighting is used to balance figures for sea state, all that can be said is that there may or may not have been more mammals than were sighted.

North Section

Otarids in the north section were represented by one unidentified sea lion and ten unidentified seals.

Cetaceans were scarce. Four Killer Whales and two Dall

Porpoise were all that were seen. The Dall Porpoise had not been recorded in the grid before this sighting.

Central Section

No seals were seen. Cetaceans included four Sperm Whales in the western half; in the eastern half one Killer Whale, five Baird's Dolphin and two unidentified dolphin were seen.

NON-GRID SURVEY

The non-grid phase of this cruise includes parts of three days of observations. Two periods were between Long Beach and point "A" of the grid, while one day was spent between point "H" and Long Beach. Both tracks were essentially the same as on previous trips.

On previous Eastern Area Cruises the non-grid portion has been analysed from the standpoint of the two cruise tracks. In this survey report an alternate treatment seems more meaningful. Instead of dividing by cruise track, this phase of the report is divided into those observations to seaward of the Channel Islands and those observations inside of the islands (see map 2). It is felt that this treatment is more meaningful when compared to the grid observations.

Flocking in the non-grid areas of this survey was a significant activity, especially in areas near Cortez and Turner Banks off San Clemente Island. This behavior will be discussed in the species accounts.

NON-GRID SPECIES ACCOUNTS

Loons

As none of the loons seen were well observed, no specific identifications were possible. All sightings were of migrants traveling north inside the Channel Islands.

Albatross

All but one of the fifteen black-footed Albatross seen were outside the islands. Two Laysan Albatross were seen near Cortez Banks.

Shearwaters/Petrels

The only Fulmar sighting for the trip was a single bird near

the grid on the north track.

Sooty Shearwaters were present inside and outside of the Channel Islands, but were most abundant in the areas near the banks on the south track. Frequently mixed with the resting flocks of Sooty Shearwater were Pink-footed Shearwaters. The ratio of Sooties to Pink-foots was 9:1 inside the channel islands and 97:1 on the outside. As was noted last month, most of the shearwaters were in flocks sitting on the water; frequently these flocks were around one or two feeding seals.

Pelicans, Cormorants, and Boobies

Brown Pelicans were seen inside the Channel Islands, especially near Catalina Island. Most were with groups of gulls sitting on the water.

A single Blue-footed Booby was seen near Cortez Banks.

Cormorants were seen only in small numbers, and all were inside the Channel Islands. Five were identified as Pelagic Cormorants.

Black Brant

A single migrating flock of 18 was seen inside the Channel Islands.

Shorebirds

Non-grid shorebirds were seen almost entirely inside the islands. Northern Phalarope, a species new to the Eastern Area Cruises, were very abundant on the north leg. Most were in small flocks of less than 20 birds, but one flock of an estimated 1500 was well observed sitting on the water.

It is interesting to note that no Red Phalarope^{were seen} inside the islands, and that no Northernns were seen far to sea.

Red Phalarope were seen outside the islands on the south track.

Jaegers and Skua

Two Skuas were seen on the north track; one was inside the islands, and one on the outside.

Pomarine Jaegers were abundant outside the Channel Islands on the south leg. Sixteen were identified, and most of the unidentified jaegers(17) were probably also Pomarines. On the north leg two unidentified Jaegers were seen outside the islands.

A single Long-tailed Jaeger was identified outside the islands on the south leg.

Gulls

The status inside and outside of the islands has changed considerably over the past month. On the inside of the islands 129 unidentified gulls were seen, only six of which were on the north leg. During earlier surveys hundreds of gulls were seen in the same areas.

Western Gulls were observed most commonly inside the Channel Islands. But when compared to other species of gulls they were proportionately more abundant on the outside. Also,in a proportionate sense,they were more abundant overall than they have been on previous cruises. Both adults and immatures were noted.

One Herring Gull was seen inside the islands; the remaining four were on the outside. The decrease of numbers correlates to the drop noted in the grid.

California gulls were the most abundant gull seen on the non-grid survey. A group of 130 was seen just off of Catalina Island; an estimated 90% of these were immature birds. On the north leg only one California Gull was seen.

One Ring-billed Gull was seen inside the islands on the north leg.

All sightings of Bonaparte's Gulls were inside the Channel Islands. One flock of 23 appeared to be migrating.

Sabine's Gulls were seen only outside the Channel Islands. On the north leg a single bird was seen, while on the south leg six were recorded.

Terns

Three unidentified terns were seen on the south track. Two were outside the islands, and one was on the inside. In Long Beach Harbor both Forster's and Least Terns were seen.

Alcids

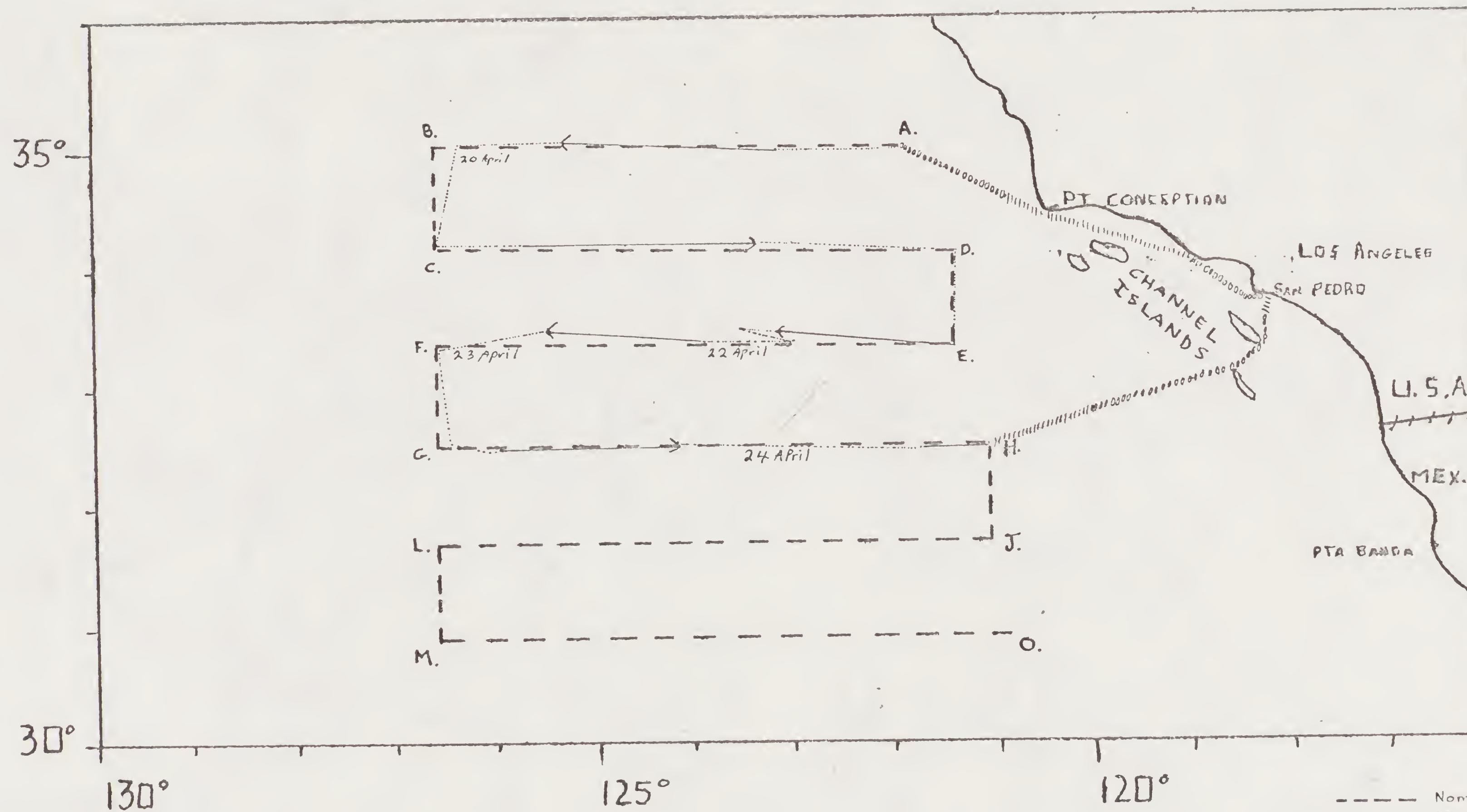
The only non-grid alcids were two Rhinoceros Auklets on the south leg outside of the islands.

NON-GRID MAMMALS

No marine mammals were seen inside the Channel Islands, and none were seen on the north portion of the non-grid cruise. On the south portion most sightings were of seals(10), four of which were thought to be California Sea Lions. In addition, five Dall Porpoise, two unidentified porpoise, a single Sperm Whale, and a Hubb's Beaked Whale were seen. The latter was well viewed at thirty to fifty feet from the ship. A description and notes were included on the log sheet.

No other marine mammals were seen on the non-grid cruise.

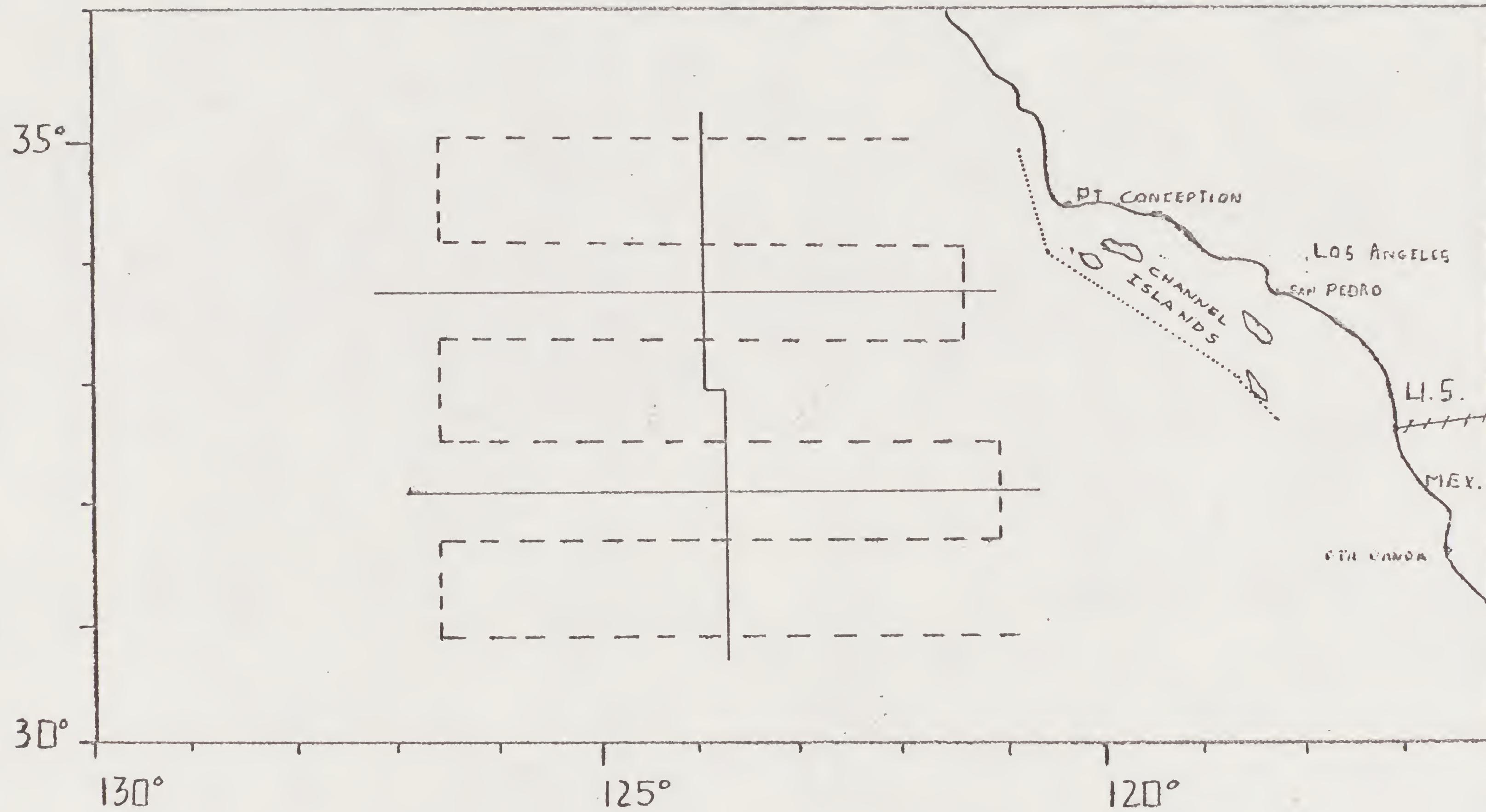
EASTERN PACIFIC OCEAN



MAP 1: EASTERN GRID NOMINAL CRUISE PLAN AND EASTERN AREA CRUISE NO: 7 CRUISE TRACK.

- Nominal Grid Plan
- Diurnal Grid Track
- Nocturnal Grid Track
- ~~~~~ Nocturnal Non-Grid Track
- ooooooo Diurnal Non-grid Track.

EASTERN PACIFIC OCEAN



MAP 2: GRID PATTERN SHOWING EAST-WEST AND NORTH-SOUTH DIVISIONS USED IN TABLES 2 and 3. ALSO SHOWN IS THE DIVISION USED IN TABLE 7.

Table 1: Diurnal Grid Summary, 19-24 April 1967, Eastern Grid Cruise 6

SPECIES	Number	% of Total Birds	No./lin.mile	No./sq.mi.	No. collected	No. Sera Samples
Black-footed Albatross	35	3.0	.054	.014		
Laysan Albatross	1	.1	.002	.001		
Sooty Shearwater	18	1.5	.028	.014		
Leach's Storm Petrel	114	9.6	.176	.176	1	1
Red-tailed Tropicbird	2	.2	.003	.002		
Herring Gull	4	.3	.006	.003		
Western Gull	4	.3	.006	.003	2	2
Short-billed Gull	1	.1	.002	.001	1	1
Sabine's Gull	2	.2	.003	.002		
Pomarine Jaeger	1	.1	.002	.001		
Long-tailed Jaeger	1	.1	.002	.001		
Red Phalarope	927	78.2	1.428	2.856		
Black-bellied Plover	1	.1	.002	.002		
Xantus Murrelet	2	.2	.003	.006	1	1
Bird sp.	4	.3	.003	.003		
Small Pterodroma	50	4.2	.039	.039		
Storm Petrel sp.	12	1.0	.018	.018		
Shearwater/Petrel	5	.4	.004	.004		
Gull sp.	1	.1	.001	.001		
Jaeger sp.	2	.2	.002	.002		
TOTALS	1186	100.1			5	5
Total miles	647					

Table 2: Sectional Breakdown of Eastern Pacific Grid Bird Populations, 19-24 April, 1967

	NORTH SECTION				CENTRAL SECTION				SOUTH SECTION			
	No.	% of Grid Species Total	% of total birds in North Section	Birds/sq.mi.	No.	%	%	B./sq.mi.	No.	%	%	B./sq.mi.
Black-foot Albatross*	26	67	5.9	.020	13	33	1.7	.010	NOT SURVEYED			
Laysan Albatross					1	100	.1	.001				
Sooty Shearwater	16	89	3.6	.025	2	11	.3	.003				
Leach's Storm Petrel	77	63	17.3	.236	37	37	4.7	.115				
Red-tailed Tropicbird	2	100	.5	.003								
Herring Gull	4	100	.9	.006								
Western Gull	4	100	.9	.006								
Sabine Gull	2	100	.5	.003								
Short-billed Gull	1	100	.2	.002								
Pomarine Jaeger	1	100	.2	.002								
Long-tailed Jaeger	1	100	.2	.002								
Red Phalarope	255	28	57.3	1.560	672	72	90.0	4.175				
Black-bellied Plover	1	100	.2	.003								
Xantus Murrelet					2	100	.3	.012				
Bird sp.					4	100	.5	.006				
Small Pterodroma	37	74	8.3	.057	13	26	1.7	.020				
Storm Petrel sp.	10	83	2.2	.031	2	17	.3	.006				
Shearwater/Petrel	5	100	1.1	.008								
Gull sp.	1	100	.2	.002								
Jaeger sp.	2	100	.5	.003								
TOTALS	445		100.0	1.967	746		99.6	4.348				
Total miles		327				322						

* The total for the two sections may not agree with the grid total due to an allowance for birds which followed from one section to another.

Table 3: East-west Breakdown of Eastern Grid Bird Populations, 19-24 April 1967

Species	No.	EASTERN HALF			Birds/Sq. mile	WESTERN HALF			B./Sq. mi.
		% of Grid Species Total	% of Total birds in East Section	No.		No.	%	%	
Black-footed Albatross	26	74	2.8		.016	9	26	2.9	.010
Laysan Albatross	1	100	.1		.001				
Sooty Shearwater	13	72	1.5		.016				
Leach's Storm Petrel	89	82	10.0		.215	25	18	8.0	.106
Red-tailed Tropicbird	1	50	.1		.001	1	50	.3	.004
Herring Gull	2	50	.2		.003	2	50	.6	.004
Western Gull	4	100	.5		.005				
Short-billed Gull						1	100	.3	.004
Sabine's Gull	2	100	.2		.003				
Pomarine Jaeger	1	100	.1		.001				
Long-tailed Jaeger	1	100	.1		.001				
Red Phalarope	698	75	80.0		3.374	229	25	73.2	1.950
Black-bellied Plover						1	100	.3	.004
Xantus Murrelet	2	100	.2		.010				
Bird sp.	3	75	.3		.004	1	25	.3	.004
Small Pterodroma	16	32	1.8		.020	34	68	10.1	.072
Storm Petrel sp.	11	92	1.3		.027	1	8	.3	.004
Shearwater/Petrel	2	40	.2		.003	3	60	1.0	.007
Gull sp.						1	100	.3	.004
Jaeger sp.	2	100	.2		.003				
TOTALS	874		99.6			313		99.2	
Total miles		414					235		

* The total for the two sections may not agree with the grid total due to an allowance for birds w

Table 4: Cruise Data Summary, Eastern Area Cruise 7; 18-25 April, 1967

Date	18	19	20	21	22	23	24	25
No. hours Diurnal Watch	3.7	12.8	13.2	13.0	13.2	13.3	13.3	12.0
Birds/lin. mile	56.0	3.6	2.26	.79	6.54	.22	.57	18.9
No. Birds	2184	430	289	109	637	24	66	2026

Table 5: Summary of Nocturnal Observations, Eastern grid Cruise 6

Date	19	20	21	22	23	24
Hours of Observation	2	2	2	2	2	2
bird	1				1	1
Black-foot Albatross	1		1		1	
Storm Petrel	1		1			
Leach's	1	1				
Phalarope	3	1			3	
Shear/Petrel	1					
Albatross					1	
Totals	8	2	2	0	2	5

Table 6: Diurnal Density of Species Groups in the Eastern Grid
19-24 April, 1967

<u>Species Group</u>	<u>No. Birds</u>	<u>Birds/lin. mile</u>	<u>Birds/sq. mile</u>	<u>Percent of Total Birds</u>
Albatross	36	.056	.014	3.0
Shearwater/Petrels	73	.113	.057	6.2
Storm Petrels	126	.195	.195	10.6
Tropicbirds	2	.003	.002	.2
Phalaropes	927	1.428	2.856	78.2
Gulls	12	.019	.010	1.0
Jaegers	4	.006	.003	.3
Alcids	2	.003	.006	.2
Miscellaneous	7	.011	.006	.6

Table 7: Summary of Non-grid Bird Observations, Eastern Area Cruise 7

	Inside Channel Islands				Outside Channel Islands			
	Number	% of Total	#/lin mile	% in flocks ⁺				
Loon sp.	173	7.9	1.99	95				
Black-footed Albatross	1	.1	.011	0	13	.6	.110	0
Laysan Albatross	0				2	.1	.017	0
Fulmar	0				1	.1	.008	0
Sooty Shearwater	230	10.5	2.64	98	1970	97.3	16.70	98
Pink-footed Shearwater	25	1.1	.288	50*	65	3.2	.550	80
Brown Pelican	14	.6	.161	50*				
Cormorant sp.	5	.2	.057	0				
Pelagic Cormorant	2	.1	.023	0				
Blue-footed Booby	0				1	.1	.008	0
Black Brant	18	.8	.207	100				
Northern Phalarope	1780	81.5	20.27	100				
Red Phalarope	0				4	.2	.034	0
Phalarope sp.	0				7	.3	.059	0
Pomarine Jaeger	1	.1	.011	0	15	.7	.127	0
Long-tailed Jaeger	0				1	.1	.008	0
Jaeger sp.	0				19	.9	.161	0
Western Gull	28	1.3	.310	10	13	.6	.110	10
Herring Gull	1	.1	.011	0	5	.2	.042	0
California Gull	136	6.2	1.56	95	1	.1	.008	0
Ring-billed Gull	1	.1	.011	0				
Bonaparte's Gull	27	1.2	.322	95				
Sabine's Gull					7	.3	.059	0
Tern sp.	1	.1	.011	0	2	.1	.017	0
Rhinoceros Auklet	0				2	.1	.017	0
TOTALS:	2184				2026			
Total miles		87				118		

*Mixed Flocks

+ Percentages estimated

4 3 10
4 9 9
3 2 1 4

2 4 0
5 6 1 0
0 0 / 0 0